

SECTION 020810 - PROTECTION OF WORKERS – LEAD-CONTAINING MATERIALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Work of this Section shall be performed in accordance with the requirements of the Contract Documents, including but not limited to Instructions to Bidders, Agreement and General Conditions.

1.2 SCOPE

- A. Contractors are alerted to the fact that representative materials were tested at the Site and multiple components were identified as lead-containing.
- B. For additional detail, refer to Section 003126 – Existing Hazardous Material Information. Testing was completed and these documents are presented with the intention to reduce, but not eliminate, uncertainty regarding the potential for hazardous materials at the Site.
- C. Lead is a toxic metal capable of causing damage to the nervous system, kidneys, bones, heart and reproductive system.
- D. Any surface coated with paint is considered to contain some percentage of lead, based on the testing information. Any alteration and/or repair that results in the disturbance of the paint coatings shall meet the requirements of OSHA CFR 29 1926.62 Construction Lead Standard.

1.3 SUBMITTALS

- A. Contractors of each trade shall submit their written Lead Program prior to the start of work. The plan must identify potential sources of lead exposure and propose specific procedures to protect workers from those exposures.

1.4 DEFINITIONS

- A. Action Level means employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air (30 ug/m³) calculated as an 8-hour time weighted average (TWA).
- B. Exposure Assessment means a Contractor's requirement to determine if any Contractor's employees may be exposed to lead at or above the action level.
- C. Lead means metallic lead, all inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds.

- D. Permissible Exposure Limit (PEL) means employee exposure, without the use of respirators, to an airborne concentration of lead of 50 ug/m³ averaged over an 8-hour period.

PART 2 - PRODUCTS

None Specified.

PART 3 - EXECUTION

3.1 PROTECTION OF WORKERS

- A. All Contractors shall be responsible to conduct an exposure assessment and shall initially determine if any Contractor's employee may be exposed to lead at or above the action level where their work causes the disturbance of paint or paint coatings, or provide a negative exposure assessment for work tasks to be completed under this scope of work.

3.2 EXPOSURE ASSESSMENT

- A. The Contractor shall collect personal samples representative of a full shift including at least one sample for each job classification in each work area either for each shift or for the shift with the highest exposure.
1. Below the Action Level - should the initial personal air monitoring results be less than 30 ug/m³ the Contractor shall make a written record of such determination. Further exposure determination need not be repeated except as follows:
 - a. Whenever there has been a change of equipment, process, control, personnel, or a new task has been initiated that may result in additional employees being exposed to lead at or above the action level or may result in employees already exposed at or above the action level being exposed above the PEL, the employer shall conduct additional monitoring.
 2. At or Above the Action Level but At or Below the PEL - the Contractor shall perform monitoring until at least two consecutive measurements taken at least 7 days apart, are below the action level at which time the Contractor may discontinue monitoring for that employee except as otherwise provided in paragraph 3.2.A.1.a.
 3. Above the PEL - the Contractor shall perform monitoring until at least two consecutive measurements taken at least 7 days apart, are at or below the PEL but at or above the action level at which time the Contractor shall repeat monitoring for that Contractor's employee as specified in 3.2.A.2.
- B. The Contractor may submit a negative exposure assessment in lieu of performing exposure monitoring.

3.3 METHODS OF COMPLIANCE

- A. To the extent feasible, Contractors must reduce worker lead exposure to the Permissible Exposure Limit (PEL) of 50 ug/m³ by a combination of engineering controls, work practice, and administrative controls.
- B. Respiratory protection and other protective equipment must be provided and used to the extent that the engineering and work practice controls cannot reduce exposure to the PEL as specified within 29 CFR 1926.62.

3.4 HOUSEKEEPING (Contractor requirements whenever lead is disturbed)

- A. All surfaces shall be maintained as free as practical of accumulations of lead.
- B. Clean up of surfaces where lead accumulates wherever possible shall be cleaned by vacuuming or other methods that minimize the likelihood of lead becoming airborne.
- C. Shoveling, dry or wet sweeping and brushing may be used only where vacuuming or other equally effective methods have been tried and found not to be effective.
- D. Where vacuuming methods are selected, the vacuums shall be equipped with HEPA filters and used and emptied in a manner which minimizes the reentry of lead into the workplace.
- E. Compressed air shall not be used to remove lead from any surface unless the compressed air is used in conjunction with a ventilation system designed to capture the airborne dust created by the compressed air.

3.5 HYGIENE FACILITIES AND PRACTICES (required above the PEL)

- A. The Contractor shall assure that in areas where Contractor's employees are exposed to lead above the PEL without regard to the use of respirators, food or beverage is not present or consumed, tobacco products are not present or used, and cosmetics are not applied.
- B. Change Areas (required above the PEL and during exposure assessment)
 - 1. The Contractor shall provide clean change areas for employees whose airborne exposure to lead is above the PEL, and as interim protection for employees.
 - 2. The Contractor shall assure that change areas are equipped with separate storage facilities for protective work clothing and equipment and for street clothes which prevent cross-contamination.
 - 3. The Contractor shall assure that Contractor's employees do not leave the workplace wearing any protective clothing or equipment that is required to be worn during the work shift.
- C. Showers (required above the PEL)

1. The Contractor shall provide shower facilities, where feasible, for use by Contractor's employees whose airborne exposure to lead is above the PEL.
2. The Contractor shall assure where shower facilities are available, that Contractor's employees shower at the end of the work shift and shall provide an adequate supply of cleansing agents and towels for use by affected Contractor's employees.

D. Eating Facilities (required above the PEL)

1. The Contractor shall provide lunchroom facilities or eating areas for Contractor's employees whose airborne exposure to lead is above the PEL, without regard to the use of respirators.
2. The Contractor shall assure that lunchroom facilities or eating areas are as free as practicable from lead contamination and are readily accessible to Contractor's employees.
3. The Contractor shall assure that Contractor's employees whose airborne exposure to lead is above the PEL, without regard to the use of a respirator, wash their hands and face prior to eating, drinking, smoking or applying cosmetics.
4. The Contractor shall assure that Contractor's employees do not enter lunchroom facilities or eating areas with protective work clothing or equipment unless surface lead dust has been removed by vacuuming, downdraft booth, or other cleaning method that limits dispersion of lead dust.

E. Handwashing Facilities (required whenever lead is disturbed)

1. The Contractor shall provide adequate handwashing facilities for use by Contractor's employees exposed to lead.
2. Where showers are not provided the Contractor shall assure that Contractor's employees wash their hands and face at the end of the work shift.

3.6 MEDICAL SURVEILLANCE (required whenever lead is disturbed)

- A. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by 29 CFR 1926.62 (j) Medical Surveillance.

3.7 TRAINING (required whenever lead is disturbed)

- A. For all Contractor's employees who are subject to exposure to lead at or above the action level on any day or who are subject to exposure to lead compounds which may cause skin or eye irritation, the Contractor shall provide a training program in accordance with 29 CFR 1926.62 (l)(2).

3.8 SIGNS (required above the PEL)

- A. The Contractor shall post the following warning signs in each work area where Contractor's employees exposure to lead is above the PEL.

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

- B. The Contractor shall assure that signs are illuminated and cleaned as necessary so that the legend is readily visible.

3.9 RECORDKEEPING (required whenever lead is disturbed)

The Contractor is responsible to establish and maintain an accurate record of all monitoring and other data used in conducting Contractor's employee exposure assessments and for each Contractor's employee subject to medical surveillance as required per 29 CFR 1926.62 (n).

3.10 OBSERVATION OF MONITORING (required whenever lead is disturbed)

- A. The Contractor shall provide affected Contractor's employees or their designated representatives an opportunity to observe any monitoring of employee exposure to lead.
- B. Whenever observation of the monitoring of employee exposure to lead requires entry into an area where the use of respirators, protective clothing or equipment is required, the Contractor shall provide the observer with and assure the use of such respirators, clothing and equipment.
- C. Without interfering with the monitoring, observers shall be entitled to:
 - 1. Receive an explanation of the measurement procedures;
 - 2. Observe all steps related to the monitoring of lead performed at the place of exposure; and
 - 3. Record the results obtained or receive copies of the results when returned by the laboratory.

END OF SECTION 020810