DEPARTMENT OF CORRECTIONS

Policy Number:	**105.123**
Title:	**Lead Based Material – Safe Work Practices**
Effective Date:	**11/19/18**

PURPOSE: To ensure the safety of staff and offenders working with lead based materials. Employees and offenders who disturb lead based materials while performing construction type activities, such as maintenance, demolition, repair, and remodeling type work, must follow safe work practices.

APPLICABILITY: All individuals working with lead based materials

DEFINITIONS:

Exposure assessment – determining the potential exposure a worker may have to a harmful substance or physical agent. An exposure assessment is conducted utilizing approved industrial hygiene sampling methods to establish an eight-hour time-weighted average (TWA).

Hazard assessment - a physical walk-through of a work area to conduct an assessment to identify safety and health hazards that require the use of personal protective equipment (PPE). The hazard assessment lists the type of hazard, the level of risk, and the seriousness of potential injuries or illnesses. The following are types of hazards: impact, compression, motion, high or low temperatures, workplace chemical exposures, harmful dusts, radiation, falling/dropping objects, sharp objects, and pinch points.

Medical surveillance - medical examinations and procedures performed under the supervision of a licensed physician to determine the physiological impact of an individual's previous exposure to lead. Medical surveillance may include such examples as blood sampling, a detailed work and medical history, and a thorough physical examination. Guidelines for conducting medical surveillance are provided by US Dept. of Labor, Occupational Safety and Health Administration (OSHA), standard 1926.62 App C.

PROCEDURES:

A. Hazard assessment
   1. A hazard assessment is conducted to determine if the work may involve the disturbance of lead based materials in accordance with the appropriate regulatory agency.
      a) For projects located at a correctional facility, the assigned safety administrator/designee facilitates the testing of suspect materials.

      b) For field services projects, the customer provides the test results of suspect materials as part of the project proposal.

   2. Results of the hazard assessment, including testing for the presence of lead, is provided to employees who work on the project.

B. Training is provided to employees working with lead based materials.
   1. Worker safety training is provided by the assigned safety administrator/ designee to ensure they are aware of the hazards of working with lead based materials, safe work practices to avoid a harmful exposure, and proper waste disposal.

2. When performing work involving the disturbance of lead based paint in a home, school, or child care facility built before 1978, the supervising employee is required to have a current training certification as required by the United States Environmental Protection Agency (EPA) through an approved trainer.

3. If employees are exposed to lead at or above the action level, then additional training must be provided in accordance with OSHA requirements. Staff training records are maintained in the training management system and EPA training certification is retained by the supervisor.

C. Personal protective equipment (PPE)

1. The appropriate PPE must be worn by employees working with lead based materials.

2. Until an initial exposure assessment is completed and the results are known, employees disturbing lead based material must wear the following:
   a) Coveralls/Tyvek suit;
   b) Gloves;
   c) Eye protection; and
   d) A respirator with high efficiency particulate air (HEPA) filtration.

3. Employees required to wear a respirator must be in compliance with Policy 105.115, "Respirator Protection Program."

4. The exposure assessment results determine the appropriate PPE to be worn for the remainder of the project. A respirator with HEPA filtration is recommended when performing any lead disturbance work that may result in exposure to airborne lead.

D. Safe work practices

1. The project supervisor must ensure that employees follow the appropriate guidelines to minimize the potential for exposure to lead.

2. Employees must take measures to minimize exposure to airborne dust or vapor generated from lead based materials.

3. Persons in close proximity to the work must be notified by the project supervisor when lead based materials may be disturbed.

4. The area must be barricaded with caution tape and signage must be posted indicating "warning, lead work area, poison, no smoking or eating."

5. A dedicated HEPA vacuum must be used to collect particles of lead based materials. Dry sweeping or brushing lead-containing dust must be avoided.

6. Plastic tarps must be used to cover immovable items and the floor of the immediate work area when performing repair or remodeling work.

7. Wet methods must be used when performing repair or remodeling work to reduce the level of exposure to lead.

8. Hygiene facilities capable of face and hand washing must be provided near the work area. Employees are required to thoroughly wash up prior to exiting the area. Eating or drinking is not allowed in the work area.

E. Exposure assessment

1. On the first day in which lead based materials may be disturbed, an eight-hour TWA exposure assessment must be conducted to determine employee exposure levels to lead. The exposure assessment requires the use of a personal sampling pump, sample filter media, and evaluation of the sample by an authorized laboratory. The supervisor/crew leader retains a copy of the exposure assessment results.
   a) If the project is at a correctional facility, the supervisor is responsible for notifying the assigned safety administrator/designee to perform the exposure assessment. The assigned safety administrator must provide the supervisor with the exposure assessment results.

   b) If the project is done by field services, the crew leader must ensure the customer conducts the exposure assessment and provides a copy of the results. The crew leader must notify his/her district supervisor of the exposure assessment results and consult with a safety administrator/designee on the interpretation of the results.

2. Once the exposure assessment sample laboratory tests are completed, employees working in the area are provided the results in writing within five working days by the supervisor.
   a) If an exposure assessment result is at or above the action level, a description of corrective action intended to reduce exposure below the action level must also be provided, blood lead level testing must be offered, and additional exposure assessments must be conducted at least once every six months. The supervisor must consult with the assigned safety administrator/designee and provide the description of corrective action.

   b) Additional exposure assessments are conducted if there is a change in conditions, such as materials, work practices, or location.

3. Objective data may be used in determining employee exposure only in the following situations:
   a) Data was obtained from an exposure assessment that was performed within the past 12 months;

   b) Data was obtained during work operations under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the new operation;

   c) Complete documentation satisfying the requirements listed in this section is included in the projects hazard assessment and readily available for review; and

   d) Objective data documentation must be reviewed and deemed appropriate by the assigned safety administrator/designee.

F. Medical surveillance

1. If an exposure assessment result is at or above the action level, the supervisor must make medical surveillance available to the affected employees to monitor for blood lead levels using the designated health care provider.

2. If an employee performs lead disturbance work more than 30 days in any consecutive 12 months, medical surveillance must be made available.

3. If the initial medical surveillance results indicate that an employee's blood lead level is at or above 40 ug/dl, then additional testing must be conducted, in accordance with OSHA requirements.

4. If a medical surveillance result indicates that an employee's blood lead level is at or above 50 ug/dl, then temporary removal from working with lead based materials at or above the action level is required. Employees with a blood lead level at or above 50 ug/dl may not be returned to working with lead above the action level until two consecutive tests indicate a blood lead level at or below 40 ug/dl.

5. Notification of medical surveillance results must be made available to the tested employee. Human resource staff must provide a copy of the physician's medical opinion to the tested employee.

G. Offender safety requirements

1. Offender workers must be informed of the hazards of the project by their work supervisor, based on the hazard assessment.

2. Offender workers are provided with the appropriate training by their work supervisor, to ensure they are aware of the hazards of working with lead based materials, safe work practices to avoid a harmful exposure, and proper waste disposal.

3. Offender training records are retained in the offender's work file by the supervisor and the offender's base file per Policy 105.125, "A Workplace Accident and Injury Reduction Program (AWAIR)."

4. Offender workers are required to wear the appropriate PPE.

5. Hygiene facilities must be provided near the work area for offender workers. Offender workers are required to thoroughly wash up prior to exiting the area. Eating or drinking is not allowed in the work area.

6. Respirator medical evaluation and fit testing must be provided by the assigned safety administrator/designee, upon notification by the work supervisor, prior to being assigned to work requiring the use of a respirator. Facility health services reviews the respirator medical evaluation for the offender and provides the results to the assigned safety administrator/designee.

7. Results of the exposure assessment are provided to the offender workers in writing by their work supervisor.

8. If the exposure assessment results are above the action level, or offender workers perform lead disturbance work more than 30 days in any consecutive 12 months, then offender

workers are offered medical surveillance. Additional testing, and removal from working with lead based materials, may be warranted based on the medical surveillance results. The work supervisor will coordinate medical surveillance with facility health services staff.

H. Hazardous waste disposal – lead based materials must be properly disposed of, according to the appropriate regulatory requirements.
   1. Waste generated at a facility must be evaluated by the assigned safety administrator/designee and disposed of accordingly.

   2. Waste generated by a field services work crew must be disposed of by the customer.

I. Required certifications – for performing work involving the disturbance of lead based paint in housing, child care facilities, and schools
   1. The DOC maintains the appropriate EPA certification.

   2. Employees responsible for supervising work listed in this section must maintain the appropriate EPA training certification.

INTERNAL CONTROLS:

A. Staff training records are maintained in the training management system and EPA training certification is retained by the supervisor.

B. Offender training records are retained in the offender's work file by the supervisor and the offender's base file per Policy 105.125, "A Workplace Accident and Injury Reduction Program (AWAIR)."

C. Hazard and exposure assessment documentation is retained by the crew leader.

D. Hazard and exposure assessment documentation for facility projects is retained by the project supervisor.

ACA STANDARDS: None

REFERENCES:
Minn. R. Ch. 4761
OSHA Regulation 1910.1025
US EPA TSCA Part 745
Policy 105.113, "Personal Protective Equipment"
Policy 105.115, "Respiratory Protection Program"
Policy 105.125, "A Workplace Accident and Injury Reduction Program (AWAIR)"
Policy 105.150, "Right to Know Program"
Policy 105.152, "Hazardous Waste Management"
Policy 205.100, "Accident Prevention and Injury Claims in Community Work Service Programs"

REPLACES: Policy 105.123, "Lead Based Material – Safe Work Practices," 1/20/15. All facility policies, memos, or other communications whether verbal, written, or transmitted by electronic means regarding this topic.

ATTACHMENTS: None

APPROVALS:
Deputy Commissioner, Facility Services
Deputy Commissioner, Community Services
Assistant Commissioner, Operations Support
Assistant Commissioner, Facility Services