

## Chapter 11: Lead Based Paint

### 1. Purpose

The purpose of this procedure is to prescribe measures and practices that will protect residents, workers and visitors at Fort Greely from health hazards associated with lead-based paint.

Paint manufactured and/or applied before 1978 is assumed to contain lead, unless testing determines otherwise. Ingestion of lead particulate can cause a variety of adverse health effects. Lead is a toxic metal that was used for many years in products such as paint in and around our homes. Exposure to lead-based paint can occur through several routes including; ingestion of paint chips and flakes, inhalation and ingestion of airborne particles, and exposure to soil containing lead-based paint residuals. Small children are particularly susceptible and vulnerable to lead poisoning from lead-based paint.

### 2. Scope

This procedure is applicable to all installation activities, tenants, contractors and other activities or personnel that occupy, use, build, repair or maintain facilities at FGA.

### 3. Responsibilities

#### a. FGA Garrison Commander

The Garrison Commander is the responsible official for environmental compliance at FGA and provides overall policy and guidance associated with environmental compliance. The Commander will consult regularly with FGA Environmental (FGA ENV) to ensure that the installation's environmental policies and procedures are consistent with Federal, State and Army requirements and are properly implemented. The Commander will consult regularly with all installation tenant organizations and departments and facilitate resolution of conflicts regarding environmental matters that cannot be resolved at lower levels.

#### b. Installation Management Agency – Pacific Area Region (IMA PARO)

The IMA PARO oversees environmental management and compliance activities at FGA and provides resources for environmental program implementation. IMA PARO ensures FGA's environmental program conforms to DoD and Army requirements and provides policy and programmatic guidance to FGA ENV.

#### c. USASMDC Environmental Division (SMDC ENV)

SMDC ENV facilitates contractual support to FGA ENV upon request, and provides assistance when requested by FGA ENV with environmental program management and execution. SMDC ENV coordinates permitting activities with MDA and assists FGA ENV in liaison with state and federal regulatory agencies. SMDC ENV will coordinate NEPA documentation associated with tenant-sponsored activities at FGA and any Garrison-sponsored activities requiring either an EA or EIS.

d. Missile Defense Agency – Ground-Based Missile Defense (GMD)

The GMD Site Manager manages all operations and activities at the Missile Defense Complex (MDC). The Site Manager will ensure that all contractors and personnel providing services or conducting operations at the MDC comply with this procedure and related Federal and state environmental requirements. The Site Manager will promptly consult with FGA ENV and/or the Garrison Commander, regarding any special considerations (e.g. security) or other issues that may affect environmental compliance at the MDC.

e. FGA Director of Public Works (FGA DPW)

The FGA DPW Director manages all DPW activities at FGA. The DPW Director will ensure that FGA ENV is consulted during the planning and formulation process for any maintenance or disposal activity that may involve lead based paint. The DPW Director will be responsible for notifying building occupants when lead based paint-work is to be performed. The DPW housing office will maintain all records of lead based paint inspections, maintenance and abatement with the real property records.

f. FGA Safety Officer (FGA SO)

The FGA Safety Officer and the DPW Contract Management office will ensure (through pre-construction meetings) that Companies/Contractors performing lead based paint activities on FGA have a respiratory protection program in place for the workers involved. The FGA Safety Officer and the DPW Contracting Office will also ensure that all companies/contractors performing lead based paint activities on FGA use workers that have received the proper awareness and worker training IAW 29CFR Parts 1910 and 1926 requirements.

g. FGA Environmental Coordinator (FGA ENV)

As the Garrison Commander's environmental representative, the FGA ENV will be the point of contact for interface with Federal, State, and local environmental regulatory agencies on all environmental compliance matters associated with Garrison and tenant activities. The FGA ENV should be informed of all lead based paint activities (e.g., maintenance, abatement, disposal issues). FGA ENV will consult with project/activity initiators and provide assistance as needed.

#### **4. Operations**

IAW DA PAM 200-1, it is assumed that paint applied or manufactured prior to 1978 contains lead unless documented testing or historical data shows that it is non-LBP. Any projects/jobs on FGA that have suspected lead based paint will be tested for confirmation of the presence (or lack) of lead based paint prior to commencement of work.

Following is a definition of lead based paint:

In liquid state – Lead based paint is any paint that contains more than 0.06% (600ppm) lead by weight (calculated as lead metal) in the total nonvolatile fraction of the liquid paint.

In a dried painted state – Lead based paint is any paint which tests equal to or greater than 1.0 milligram/cm<sup>2</sup> when using the x-ray fluorescence analyzer or 0.5% by weight when using atomic absorption spectroscopic analysis.

Lead is considered a hazard if there are greater than 40 micrograms of lead in dust per square foot on floors; 250 micrograms of lead in dust per square foot on interior window sills and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200 ppm average for bare soil in the rest of the yard.

Lead based paint is usually not a hazard if it is in good condition, and it is not on an impact or friction surface, like a window. Maintaining the integrity of painted surfaces is the first line of defense against lead exposure. Lead hazards will be managed by interim controls. Lead-contaminated paint will be abated when interim controls are ineffective, not sufficiently protective of public health, or when economically justified. IAW AR 420-70 and AR 200-1, lead-contaminated paint and soil will be managed in place by interim controls unless economic, operational, public health or regulatory requirements dictate its removal.

AR 420-70, Section 3-4(b) recommends that the Department of Housing and Urban Development's "Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing", be followed as a standard of care for assessment, management, and control of lead hazards.

a. Interim Controls

There are controls that when put in place, reduce exposure to lead-based paint hazards. Avoid activities that disturb or damage lead-based paint and create dust. It is extremely important to avoid sanding or scraping leaded paint. Other methods include:

- **Cleaning.** Clean surfaces to reduce levels of leaded dust, including carpets and floors. Keep areas as "dust-free" as possible.
- **Paint Stabilization.** Keep painted surfaces in good repair. Intact lead paint does not present as much risk as does damaged or deteriorated lead paint. Remove/repair flaking or chipping paint. Repaint surfaces with non-lead based paint products.
- **Defective Building Systems.** Repair all rotted or defective substrates that could lead to paint deterioration.
- **Correcting Dust-Generating Conditions.** Lead dust is generated when lead based painted surfaces experience friction or impact. When possible, friction and impact surface areas are to be repaired. Examples include re-hanging doors, installing doorstops, installing stair treads, or covering lead based painted flooring with carpet or area rugs.
- **Bare Residential Soil.** Soil interim control methods include adding impermanent surface coverings such as gravel, bark, and sod as well as land use controls such as fencing, landscaping, and warning signs.
- **Education.** Educate residents and maintenance workers on how to avoid lead poisoning and on how to monitor known lead based painted areas in their homes or work areas.

Repairing damaged lead based paint by cleaning and painting over it has been shown to reduce lead levels in children's blood by at least 25%.

b. Notifications

Building occupants should be informed of the presence of lead-based paint and hazards associated with it. Occupants should understand the importance both of not disturbing lead-based paint and of reporting the presence of chipping/flaking paint or visible dust and debris.

Occupants should be notified prior to the start of lead-based paint O&M work affecting areas they use. Occupants should receive advanced notice when relocation will be necessary.

c. Testing

Accepted methods of testing for lead based paint include using direct reading X-ray Fluorescence (XRF) and analysis of paint-chip samples to measure the lead levels in paint. Testing results of lead based paint samples are to be kept with the real property records for each facility.

d. Training

All persons performing lead based paint activities; either maintenance or removal must be properly trained and certified IAW 40 CFR 745, Subpart F and 29CFR 1926.

e. Exposure Issues

The FGA Safety Officer and the DPW Contract Management office will ensure (through pre-construction meetings) that Companies/Contractors performing lead based paint activities on FGA have a respiratory protection program in place for the workers involved. The FGA Safety Officer and the DPW Contracting Office will also ensure that all companies/contractors performing lead based paint activities on FGA use workers that have received the proper awareness and worker training IAW 29CFR Parts 1910 and 1926 requirements.

f. Disposal

Disposal of any suspected and all known lead contaminated waste or debris shall be done in accordance with FGA ENV direction. The FGA ENV office is to be notified in advance of any work that may generate lead based paint waste.

g. Additional Information

Some additional sources for information on lead based paint:

The National Lead Information Center, 1-800-424-5323.

[www.epa.gov/lead](http://www.epa.gov/lead)

[www.hud.gov/offices/lead/](http://www.hud.gov/offices/lead/).

## 5. Surveillance

All custodial and maintenance workers should have as a minimum, lead based paint awareness training and should be monitoring known lead based paint hazards present in their work areas as part of their daily work routines. Concerns about the presence of lead should be reported to FGA ENV who will instigate a lead hazard evaluation and determine the appropriate course of action.

Residents of base housing will be informed by the Housing Office of potential lead based paint hazards and should contact the Housing Office with any concerns or questions.

All installation and tenant organizations are encouraged to regularly inform FGA ENV of planned projects/activities and consult with FGA ENV early in the planning process so lead based paint issues, if any, can be addressed.

## **6. Record Keeping**

Data concerning the locations and condition of Government housing components containing lead based paint shall be maintained in the DPW Office with the real property records.

Records concerning cases of lead elevated blood levels for FGA workers will be maintained in the DPW Personnel Records for the specific employee. DPW workers do not currently perform lead based paint activities as these jobs are contracted out to the Base Operations Support (BOS) Contractor or other companies/contractors. Lead based paint health related records for tenant and contractor activities are the responsibility of the tenant/contractor.

Disposal records of lead based paint related waste will be kept in the FGA ENV Office.

## **7. Reporting**

Any potential lead based paint hazards are to be reported to the FGA ENV.

## **8. References**

- a. AR 420-70, *Facilities Engineering Buildings and Structures*, Nov 1997.
- b. AR 200-1, *Environmental Protection and Enhancement*, Feb 1997.
- c. DA PAM 200-1, *Environmental Protection and Enhancement*, Jan 02
- d. PL 102-550, *Lead-Based Paint Hazard Reduction Act of 1992*.
- e. The Department of Housing and Urban Development (HUD), *Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing*, Jun 03.
- f. 29CFR1926 Safety & Health Regulations for Construction, Jan 01.
- g. 40CFR 745, *Lead-Based Paint Poisoning Prevention in Certain Residential Structures*, Jul 03.
- h. 24CFRPart 35, *Lead-Based Paint Poisoning Prevention in Certain Residential Structures*, Jun 04.
- i. EPA 747-R-95-002a, *A Field Test of Lead-Based Paint Testing Technologies: Summary Report*, May 95.