

Lead Based Paint Policy

1. Guidance for the removal or maintenance of lead-based paint has undergone changes that affect the painting industry. The U.S. Department of Housing and Urban Development (HUD) has updated their Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. The Missouri Department of Health (MDOH) has issued its own lead based paint regulations, 19 CSR 20-8.020, Lead Inspectors/Risk Assessors, Lead Abatement Workers, and Lead Abatement Supervisors/Contractors and 19 CSR 30-70, Lead Abatement and Assessment Licensing, Training Accreditation. The Occupational Safety and Health Administration (OSHA) 29 CFR 1926, Construction Standard for Lead, includes safety standards regulating the methods for the maintenance and removal of lead based paint.

2. The above requirements have changed the focus from an effort to determine the hazard of paint, based on lead content, to identifying that particular lead hazard which may cause harmful exposure to humans.

3. OSHA regulation states that contractors or others who work with the maintenance of a painted surface must perform a lead hazard evaluation prior to disturbing paint and have a Standard Operating Procedure (SOP) in place that, if followed, will protect the worker. It can involve testing for lead or may involve assuming all paint to be lead based and taking precautions to prevent the release of this hazardous substance.

4. The Missouri regulations states that personnel who do investigations for lead hazards, risk assessments, lead abatement workers, lead abatement contractors/supervisors and project designers must be certified and licensed by the State of Missouri. Notification of projects shall be made to the State of Missouri and shall comply with proper work practice standards.

5. The U.S. Department of Housing and Urban Development is concerned primarily with the health and welfare of children residing in public or government housing and the prevention of exposure to lead.

6. Historically, the Directorate of Public Works Environment, Energy, and Natural Resources (DPW-EE) have conducted lead inspections using direct reading X-ray Fluorescence (XRF) and analysis of paint-chip samples to measure the lead levels in paint. Under new HUD guidance this method may continue to be used for lead inspection testing. However, these methods can only tell you the amount of lead in a painted surface but is not sufficient in determining the exposure to a health risk. There is no level of lead pollutant that defines low risk, only action level.

7. OSHA standards require the renovator/contractor to assess the actual risk associated with paint maintenance. The assessment shall include removal methods, the physical condition of the paint, and the personal protective measures workers will be using as well as the potential to create a health hazard to those exposed to this risk.

8. The Directorate of Public Works Housing Division (DPW-H) has ultimate responsibility for providing safe and healthful facilities for occupants. The regulations now focus on several avenues of concern, rather than simply the presence of paint with some arbitrary lead content. Only if lead dust/debris and deteriorating paint (chipping or peeling) is present on surfaces is there a real health concern from lead-based paint. When there is a concern about the presence of lead, a State of Missouri certified person shall conduct a lead hazard evaluation and determine the appropriate course of action. Notification as to the location and amounts of lead in paint in individual quarters shall be made available during initial orientation for occupation. Notification to the present occupant of any renovation of components, which contain lead, shall be made before work is scheduled to commence. Data concerning the locations and condition of Government housing components containing lead-based paint shall be maintained and updated as necessary. Blood screening for lead in children is available upon request at the Installation medical facilities. The DPW-H will coordinate with the Installation medical facility for immediate removal of personnel with abnormal levels of blood lead. These precautions assure the occupant of a safe and healthy environment while residing at Fort Leonard Wood.

9. The Directorate of Public Works Environment, Energy and Natural Resources Division (DPW-EE) will provide an individual that is certified and licensed with the State of Missouri in accordance with the regulations. The DPW-EE will conduct inspections for lead in paint and provide guidance as to further action as needed. The DPW-EE coordinates disposal of lead waste that is considered hazardous waste.

10. Contractors involved in paint maintenance or removal will coordinate turn-in or disposal of such waste with the DPW-EE. All necessary paperwork, packaging, labeling and coordination with the DPW-EE will be done prior to the attempted turn-in to the DPW. If components containing lead-based paint are removed, or if the facility is demolished, Missouri Department of Natural Resources (MDRN) Solid Waste Regulations allow for disposal in a State permitted demolition or sanitary landfill.

11. The Directorate of Public Works Engineer Division (DPW-E) will ensure all design projects and contracts concerning paint maintenance include consideration for the possibility of lead in paint. Such documents will be routed through the DPW-EE for environmental consideration. The DPW-E will assure person/persons who design projects, which remove or maintain surface coatings that contain lead pollutants, are licensed and certified by the State of Missouri.

12. The Directorate of Public Works' policy on lead in paint:

a. Maintaining the integrity of painted surfaces will be the first line of defense against exposure of a lead hazard. As family housing renewal projects are completed, all components deemed a lead hazard will be removed and properly disposed of according to current guidelines.

b. Persons certified and licensed as required by State of Missouri regulations and in compliance with the OSHA and HUD standards shall do maintenance involving surface preparation or other maintenance of confirmed lead-based paint.

c. Suspected or confirmed cases of lead in paint with regards to an occupied building or family housing unit, unrelated to an on-going paint project, will be addressed on a case by case basis by the DPW-H. The DPW-EE will perform spot lead inspections and provide guidance concerning follow-up action as needed. The DPW-E will ensure a State of Missouri certified and licensed project designer will perform all designs for remediation projects of paint containing lead. The Directorate of Public Works Engineer Division Inspection Branch (DPW-EI) will ensure all remediation contracts of paint containing lead include State of Missouri, OSHA and HUD requirements.

24 Feb 00

FACT SHEET

SUBJECT: Lead Based Paint

1. Updates and additions to existing State of Missouri and Federal regulations concerning lead-based paint (LBP) have brought new reasons for concern in the painting industry. These concerns include methods of detection, assessment of hazards, notification to regulatory agencies, abatement procedures as well as State of Missouri certification and licensing of industry professionals.
2. Regular maintenance of painted surfaces along with revitalization projects of electrical wiring, floor refinishing and bathroom replacement will incorporate LBP contaminated components removal in housing units. These projects will eventually remove hazards associated with lead in surface coatings found in the units.
3. The State of Missouri Department of Health (MDOH) must receive notification of LBP abatement in units before the project begins. The renovator/contractor will provide a SOP detailing how the abatement will be done with precautions taken to prevent health hazard to occupants during the abatement. Notification to the owner/occupant detailing work practices must also be given before the project begins. The renovator/contractor must provide a completion report at the end of the abatement project to the owner and the MDOH. Records of abatements must be kept on hand for three years following the completion of the project.
4. Public announcements in the form of news paper articles placed in the Guidon, and in the form of information packages given at the time of initial entry on FLW will keep housing occupants informed of suspected and confirmed hazards associated with lead in surface coatings associated with the housing units.
5. Elevated blood lead levels in children will be addressed on a case by case basis by the GLWACH. The medical staff of GLWACH will be involved in the survey of blood lead levels when voluntary screening for blood lead levels in children detect a possible health concerns. Appropriate measures will be initiated, if a problem is found, to remove the patient from the environment in which the hazard is denoted.

6. Information concerning LBP in family housing quarters, locations, condition of, and abatement records will be kept in a database at the Directorate of Public Works Housing Division.

7. LBP in cantonment buildings will be handled on a case by case basis and will incorporate the new requirements. Permanent buildings will be abated by the paint renovator/contractor. Most temporary buildings (WWII) will be demolished and disposed of in accordance with State of Missouri regulations. Removal of LBP from industrial activities will also be in accordance with the new guidelines. The MANSCEN Safety Office and/or GLWACH Preventive Medicine and/or DPW must approve all U-DO-IT projects concerning the maintenance of coated surfaces.

FAMILY HOUSING OCCUPANT INFORMATION HANDOUT

Lead, in the past, has been used in paint primarily for exterior surface but also for some interior trim. The Consumer Product Safety Commission banned the use of lead in paint for housing in 1978. The primary health concern of lead in paint is toxicity to humans, if ingested by eating or inhalation. The most common avenues of lead exposure are inhalation of lead dust or ingestion of paint chips primarily by children, who could pick up and eat paint chips from inside or outside of the home. Children can come in contact with paint chips that are the result of peeling paint or dust, in conjunction with painted surfaces containing lead, that are disturbed by sanding, grinding or scraping. A less common concern is for maintenance workers who prepare surfaces for painting requiring sanding or scraping the old paint surface before repainting. These practices may generate paint chips or dust that may be ingested.

If the paint is in good condition and there is no sanding, grinding, or scraping of the painted surfaces, there is little or no cause for concern of exposure to lead. The Directorate of Public Works (DPW) started using latex-based paint on interiors of housing units shortly after its introduction in the late 1950's. Past contracts to replace windows also included the removal and replacement of sills and trim that may have contained lead based paint. New siding was installed on all family housing units between 1978 and 1982. The siding was installed to enclose the existing painted wooden siding, which contained lead based paint. This enclosure eliminated a major concern for lead exposure.

A 1994 survey to define the presence of lead in paint was conducted in family housing. The random survey included units located in both Officers and Enlisted housing areas. Results of the survey show a very limited amount of lead based paint in the units, and that the lead-based paint found was in good condition. There were some scattered occurrences of window sills, front doors and associated trim, a limited number of window sills, a limited number of kitchen and living room back doors and thresholds, exterior hand rails, and carport supports that contained lead based paint.

As a result of regular scheduled maintenance, housing units on Fort Leonard Wood will undergo complete renovation. Any building components that are found or have been

found to contain lead based paint will be removed and disposed of properly to protect the workers during the renovations. This removal also eliminates the possibility of exposure from lead for housing occupants.

Maintenance of the painted surfaces is the first line of defense against exposure to a lead hazard. The housing units have been painted on a regular basis since they were built in the late 1950's and early 1960's. This kind of regular maintenance helps to control any exposure from lead if it is present. As a result, very few of housing units have conditions that are cause for concern. However, if you have painted surfaces that are peeling or show other significant signs of deterioration, particularly window sills and door/window trim, you may contact the DPW Housing Division Facility Management (596-5917), or the DPW Work Order Desk (596-0333) for an appointment to have the condition checked.

Maintenance of living quarters by occupants in Government furnished housing to reduce any exposure to lead in paint should include the following:

a. Regular cleaning of areas associated with lead-based paint should include dust removal with moist cleaning materials (disposable dust cloths, etc). Cleaning methods should include starting at the highest elevation and working toward the lowest level. Cleaning materials will be placed in a tightly closed plastic bag and place in the normal trash for disposal as solid waste.

b. Cleaning of floors in the areas of concern for LBP:

1. Lightly mist carpets with water mixed with soap before vacuuming dust and loose paint particles from the area. Materials gathered may be disposed of as normal solid waste.

2. Uncarpeted floors should be damp mopped with a disposable mop or cloth and clean soapy water. Place the used cleaning materials along with any collected particles in a plastic bag, which may be disposed of with the normal solid waste. Water can be disposed of by normal measures through the facility's collection system (sinks or other drains). Rinsing of the floor should be done with additional clean water and cleaning materials. These materials will be disposed of in the same manner as the initial cleaning.

Lead Based Paint (LBP) Management Plan

I. Family Housing

a. Regular maintenance of family housing units, over an extended time frame, will complete the revitalization of each unit. Revitalization contracts do allow for the identification, removal, and legal disposal of LBP and LBP contaminated components that constitute a hazard to the public. Any building components that are found to contain such a health hazard will be removed and disposed of properly to protect the workers during the revitalization and to permanently remove the lead hazard. The building will then be considered lead free on the interior, and recorded as such in the building record. A lead hazard may still exist on the exterior of the building that is covered with metal siding thus greatly reducing the exposure level.

b. Renovation activities that are currently scheduled, rewiring, floor refinishing and bathroom replacements, will include LBP component removal. Such work has been included in the renovation contracts and should continue to maximize the removal of LBP containing components.

c. When quarters are occupied and the occupant requests painted surface to be repaired, identification of the lead hazard and recommendations of appropriate actions will be done to eliminate the hazard from lead. There are several sets of quarters per month that request work on painted surfaces. The DPW paint contractor will do maintenance of all coated surfaces. Notification to the occupant as well as notification to the State of Missouri Health Department, as required by State of Missouri regulations, will be done before work begins.

Several options for lead abatement may exist:

1. Temporarily remove the occupants while the lead hazards are removed.
2. Repair and encapsulate the affected portion of the surface, and wait until the occupants clear quarters and then remove the hazard.
3. Placement of the quarters on stand-by until the renovation and or repair can be completed as part of the MCA project.

d. When non-occupied quarters are painted, the Family Housing paint contract will allow for the identification and removal of lead hazards in unoccupied quarters. There are currently 1200 to 1400 units that require maintenance per year. Over an extended period, all of the units would have been serviced. The primary plan for abatement of LBP will be component removal. If the paint contractor does the identification of the health hazard, a random confirmation sampling inspection should be implemented. A State of Missouri qualified person must do initial as well as confirmation inspections.

e. Public announcements in the form of newspaper articles will be placed in the Guidon. (See Public Notice) Housing occupants will be notified concerning the status of the program, and what to do if they have a question about the condition of the paint in their quarters in an information package given to each occupant at the time they are issued quarters on FLW.

f. In instances of the possibility of an elevated blood lead level of a child exists, the GLWACH medical staff will become involved for a survey of blood lead levels. The current policy is to handle elevated blood lead levels on a case by case basis. The public should become educated on the signs or situations related to exposure from excess amounts of lead that will facilitate a lead screening. At this time there is no random screening program for the presence of elevated blood lead levels. The affected party must make requests, for a blood lead level screening to the GLWACH.

g. An updated data-base outlining information of locations and conditions of LBP and all notifications to the State of Missouri will be kept by the DPW Housing Division. All renovations or revitalization must be documented in the databases to avoid duplication of efforts with regards to LBP.

II. Cantonment Facilities

LBP in cantonment facilities will be addressed on a case by case basis. The majority of LBP concerns have been eliminated through the continued demolition of the World War II buildings. The Directorate of Public Works Environment, Energy and Natural Resources Division (DPW-EE) has identified areas of concern for LBP on components that require surface preparation prior to painting. The current DPW painting contract has provisions for the removal and legal disposal of LBP. The DPW-EE will review contract specifications and can provide lead removal procedures. U-DO-IT projects will coordinate all coated surface maintenance through the MANSCEN Safety Office and/or the GLWACH Preventive Medicine Office and/or the Directorate of Public Works. (See Lead Abatement Procedures).

LEAD BASED PAINT MANAGEMENT PLAN

LOW OPTION

- Supply information to occupants
 - Assignment package
 - Guidon articles
 - Information from health care provider

- Encapsulate all peeling paint not addressed by the survey
 - Service orders
 - Termination surveys

- Maintain 1994 Mandated Survey Data-Base for LBP
 - In house personnel
 - Supplement with contract personnel

MEDIUM OPTION

- Identify hazards by qualified personnel in response to service orders.
 - In house personnel or contract supplement
 - Reduce the Lead Hazard through the DPW paint contract
 - Component replacement

- Identify and total abatement during renovation
 - In house personnel or contract supplement
 - Rewiring renovation contract abatement

- Identify hazards and removal through Corps of Engineers revitalization projects.
 - Full lead survey of quarters
 - Abatement of lead based paint hazard associated with project

- Survey and abate upon request from MEDDAC
 - Elevated blood lead levels
 - Identify hazards by in house personnel with contract supplement
 - Abate as necessary

HIGH OPTION

- Survey all quarters by contract
 - Do a complete survey interior and exterior

- Make all quarters lead free by contract
 - Remove all lead hazard containing components or remove lead hazards from the surface areas

PUBLIC NOTICE

EXAMPLE OF GUIDON ARTICLE ON LEAD BASED PAINT IN FAMILY HOUSING

Lead, in the past, was used in paint, primarily for exterior surfaces but also for some interior trim. The Consumer Product Safety Commission banned the use of lead in paint for housing in 1978. The main concern, although not the only concern, for lead exposure is ingestion of paint chips by children. Children could ingest the paint chips by picking up and eating paint chips from inside or outside of the home. Children can come in contact with paint chips that are the result of peeling paint or painted surfaces that are disturbed by sanding, grinding or scraping. If the paint is in good condition, and there is no sanding, grinding, or scraping of the painted surfaces, there is little or no cause for concern of exposure to lead. The Directorate of Public Works (DPW) began using latex-based paint for interiors of housing units, shortly after it's introduction in the late 1950's. Past contracts for replacement of windows also included the removal and replacement of sills and trim that may have contained lead based paint. New siding was installed on all family housing units between 1978 and 1982. The siding was installed to enclose the existing wooden siding, which contained lead based paint. When enclosed, it would no longer be a major concern for exposure to lead.

Regular maintenance of the family housing units will provide eventual complete renovation. Any building components that are or were found to contain lead based paint would be removed and disposed of properly to protect the workers and occupants during the renovations. This removal also eliminates the possibility of exposure to lead for housing occupants in the future.

Maintenance of the painted surfaces along with proper cleaning of facilities by occupants is the first line of defense against ingestion. The housing units have been painted on a regular basis since they were built in the 1950's and 1960's. This kind of regular maintenance helps to control any exposure to lead if it is present. As a result very few of family housing quarters have conditions which should be cause for concern. However, if you have painted surfaces that are peeling or show other significant sign of deterioration, particularly window sills and door/window trim, you may contact the Housing Division (596-0962) or the DPW work order desk (596-0333) for an appointment to have the condition checked.

LEAD ABATEMENT PROCEDURE

The following abatement procedure should be more than adequate for safe, efficient and cost effective removal of the interior components containing lead based paint and comply with State of Missouri work practice standards.

1. Identify the components to be effected by the renovation using approved methods of inspection or detection of LBP.

2. Lead abatement can be accomplished by component removal with replacement of a lead-free surface coated component. Component removal can be done with little or no generation of lead dust particles. Abatement of LBP will normally be done in unoccupied units. When conducting a lead abatement project using the replacement strategy, these minimum requirements shall be met:

a. The site shall be prepared by first establishing a regulated area using fencing, barrier tape or other appropriate barriers. The regulated area shall be defined to prevent unlicensed and/or unauthorized personnel from approaching closer than twenty (20) feet to the replacement operation.

b. Signs shall be posted at all entrances to the regulated area and shall include the words "WARNING: LEAD AREA, POISON- NO SMOKING OR EATING" in bold lettering not smaller than two inches tall with additional language prohibiting entrance to the regulated area by unauthorized personnel.

c. Any heating and cooling systems within the regulated area shall be shut down and the vents sealed with 6-mil poly to prevent lead dust accumulation within the system.

d. All items shall be cleaned within the regulated area by HEPA vacuuming and or wet wiping with a cleaning solution. Items shall then be removed from the area, or covered with 6-mil poly and sealed with tape.

e. At a minimum, one layer of 6-mil poly will be placed on the floor at the base of the component and extend at least ten (10) feet beyond the perimeter of the component to be replaced.

f. The component and the area immediately adjacent to the component shall be thoroughly wetted using a garden sprayer, airless mister or other appropriate means to reduce airborne dust.

g. After removal of the component the surface behind the component shall be thoroughly wetted to reduce airborne dust.

h. The component shall be wrapped or bagged completely in 6-mil poly and sealed with tape to prevent loss of debris or dust and disposed of in accordance with appropriate regulations.

i. Prior to installing a new component, the area of replacement shall be cleaned by HEPA vacuuming. After replacement is complete, the regulated area shall be cleaned with a cleaning solution, rinsing all surfaces, and then HEPA vacuuming the surface again. Cleaning shall begin at the end of the work area farthest from the main entrance to the area and from the top to the bottom of the regulated area.

j. Following abatement of the affected component, a final clearance shall be performed to ensure total abatement of the lead hazard. A State of Missouri licensed lead inspector or risk assessor shall perform the post-abatement clearance.

The following minimum abatement procedure should be more than adequate for safe, efficient and cost effective removal of exterior components containing lead based paint.

1. Since the components containing LBP to be effected by the renovations have been identified, further detection testing will not be needed.

2. Lead abatement can be accomplished by component removal. Component removal can be done with little or no generation of lead dust particles and shall contain the following abatement methods for exterior component removal:

a. The site shall be prepared by first establishing a regulated area using fencing, barrier tape or other appropriate barriers. The regulated area shall be designated as to prevent unlicensed and/or unauthorized personnel from approaching closer than twenty (20) feet to the removal operation.

b. Signs shall be posted at all entrances to the regulated area, and shall include the words “WARNING: LEAD AREA, POISON-NO SMOKING OR EATING” in bold lettering not smaller than two inches tall with additional language prohibiting entrance to the regulated area by unauthorized personnel.

c. All movable items shall be moved twenty (20) feet from working surfaces. Item that cannot be readily moved twenty (20) feet from working surfaces shall be covered with 6-mil poly and sealed with tape.

d. At least one layer of 6-mil poly shall be placed on the ground and extend at least ten (10) feet from the abated surface plus another five (5) feet out for each additional ten (10) feet in surface height over twenty (20) feet. In addition the poly shall:

1. Securely attached to the side of the building with cover provided to all ground plants and shrubs in the regulated area;

2. Protected from tearing or perforating;
3. Contain any water, including rainfall, which may accumulate during the abatement;
4. Be weighted down to prevent disruption by wind gusts.
 - e. All windows within the regulated area and all windows below and within twenty (20) feet of working surfaces shall be closed. It is recommended that the windows of adjacent structures within twenty (20) feet also be closed.
 - f. Work shall cease if constant wind speeds are greater than ten (10) miles per hour.
 - g. Work shall cease and cleanup occur if rain begins.
 - h. All equipment used within the regulated area shall be thoroughly cleaned with a cleaning solution and/or vacuumed with a HEPA vacuum prior to removal from the site.
 - i. The regulated area shall be HEPA vacuumed and cleaned of paint chips. Poly and other debris generated by the abatement project work at the end of each workday.
 - j. The component removed shall be wrapped with 6-mil poly and disposal of component and abatement debris shall be done in accordance with State and Federal regulations.