LEAD-BASED PAINT MANAGEMENT PLAN
HOLLOMAN AFB

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HOLLOMAN AFB, NM LEAD-BASED PAINT MANAGEMENT PLAN (LBMP)

1. **INTRODUCTION:** Ingestion of paint chips or dust containing lead can cause adverse health effects in children and adults. Lead compounds in paint applied to facilities can be a source of hazardous exposure to lead for military and civilian employees, their families, and contractors performing work in facilities. Children are at greater risk of lead poisoning due to their lower body weight, developing nervous system, and greater tendency to ingest paint chips/dust. This document details how Holloman AFB manages lead-based paint (LBP). The ultimate goal of the lead-based paint management is to reduce the potential for LBP exposure to children and adults.

2. **PURPOSE:** This plan provides policy and guidance needed to implement and execute the Air Force policy to protect facility occupants and workers who perform maintenance, repair, modification, and renovation activities from hazardous exposure to lead in lead-based paints (LBP).


4. **RESPONSIBILITIES:**

   **4.1 Installation Environmental Leadership Council (ELC).** The ELC, in addition to its other responsibilities, will direct development of a base-specific plan to manage lead hazards. The council will be responsible for the following:
   - 4.1.1 Create a LBP working group and monitor its activities.
   - 4.1.2 Appoint a Lead-Based Paint Program Officer (LBPO) as the primary focal point for LBP matters and as the chair of the LBP working group.
   - Receive periodic reports from the LBP Working Group on the status of the LBP program.

   **4.2 LBP Working Group.** The LBP Working Group reports to the ELC on the status of the LBP program. The working group is chaired by the LBPO. The LBP Working Group will include, as a minimum, representatives from Aerospace Medicine, Bioenvironmental Engineering, Public Health, and Civil Engineering (Environmental, Housing, and Operations). The LBP working group will:
   - 4.2.1 Monitor the development of the LBP Management Plan.
4.2.2 Evaluate the LBP Management Plan's effectiveness.

4.2.3 Review reports provided by the LBPO.

4.2.4 Coordinate activities between organizations for the control and elimination of lead containing materials and products (i.e., supply, CE for coating materials, base plumbing shop, etc.)

4.2.5 Modify the Management Plan when necessary to improve operations or to comply with new regulatory requirements.

4.2.6 Develop procedures to prevent LBP from being used on facilities.

4.2.7 Assist the LBPO in accomplishing the duties outlined in this management plan.

4.3 Lead-Based Paint Program Officer (49CES/CEV/LBPO). The 49 CES/CEV Flight Chief or his designee is the LBPO per ELC appointment. The LBPO must have access to facility folders and records maintained by Base Civil Engineering (BCE). Additionally, the LBPO should be readily accessible to the BCE operations community. The individual should possess the technical ability to attend and successfully complete a one-week lead hazard training course approved by the EPA. The LBPO duties are as follows:

4.3.1 Chair the LBP Working Group and conduct periodic meetings.

4.3.2 Oversee the development and use of the LBP Management Plan.

4.3.3 Maintain and/or identify location of all records for the program, including lead surveys, lab results, inspections, and abatement actions.

4.3.4 In coordination with the LBP Working Group, identify high-priority facilities.

4.3.5 Assist in Lead Toxicity Investigations (LTI).

4.4 Chief of Aerospace Medicine (49ADOS/SGGF). 49ADOS/SGGF will perform the following:

4.4.1 Initiate and supervise Lead Toxicity Investigations.

4.4.2 In conjunction with the pediatric staff, ensure evaluation, treatment, and follow-up for children with Elevated Blood Lead (EBL) levels.

4.4.3 Oversee the development of a base blood lead screening program.

4.4.4 Serve as a member of the LBP Working Group.
4.5 **Bioenvironmental Engineering (49ADOS/SGGFB).** The LBP Management Plan will require periodic environmental and employee testing. Bioenvironmental Engineering will:

4.5.1 Perform occupational exposure monitoring to assess worker exposure and efficiency of work methods in reducing lead in dust generation.

4.5.2 Ensure environmental samples are collected and analyzed.

4.5.3 Serve as a member of the LBP Working Group.

4.5.4 Conduct initial surveys and the lead exposure risk assessment (LERA) for LBP hazards with the LBPO.

4.5.5 Assist in Lead Toxicity Investigations.

4.5.6 Develop a Respiratory Protection Program for the LBP construction and maintenance activities.

4.5.7 Recommend and monitor abatement and in-place management methods to BCE based on health hazards.

4.5.8 Apply for and maintain radioactive material permit for the X-Ray Fluorescence (XRF) Spectrum Analyzer.

4.6 **Public Health (49ADOS/SGGFM).** 49ADOS/SGGFM will perform:

4.6.1 Epidemiological Tracking of Blood Lead Screening Program.

4.6.2 Participate in Lead Toxicity Investigations.

4.6.3 Serve as a member of the LBP Working Group.

4.7 **49th Medical Group's Pediatrics Staff (Blue and Silver Team Clinics).** Blue and Silver Team Clinics will perform:

4.7.1 Diagnose and Treat elevated blood lead levels in children as required.

4.7.2 Conduct Pediatric Blood Lead Screening as required by current Air Force Policy.

4.7.3 Refer elevated pediatric blood lead results to Public Health (SGGFM).

4.7.4 Assist in Lead Toxicity Investigations.
4.8 Civil Engineering (CE) Planners, Designers, Supervisors and Workers. CE personnel must know where lead-containing materials may be encountered and consult with the LBPO and SGGFB when work may disturb LBP.

4.8.1 In the initial design phase of a project or work requirement development, include the LBPO to determine potential areas of concern.

4.8.2 CE supervisors ensure applicable workers use required personal protective equipment and complete training requirements when established by the LBPO.

4.8.3 CE personnel report situations where peeling/cracking paint is identified in MFH to the LBPO and SGGFB.

4.8.4 Ensure that project planners and designers have clearly identified lead hazards to contractors in the bid documents.

4.8.5 In conjunction with Contracting, develop standard contracting language to inform contractors of the potential to create LBP hazards. It will be up to the project designers to determine where the hazards may exist and what steps the contractors must take to protect base personnel and families.

4.9 Housing Flight Chief. Children are affected the most severely from lead exposure, and therefore the Housing involvement in the LBP Management Plan is very important. The Housing Flight Chief will:

4.9.1 Be familiar with and have easy access to all housing survey data involving LBP.

4.9.2 Attend training sessions with CE personnel to become familiar with lead issues.

4.9.3 Closely monitor renovation, maintenance, contractor, and repair activities that may disturb LBP.

4.9.4 Assign families with children under age seven in those units of lowest risk to LBP exposure, whenever possible.

4.9.5 Provide LBP informational packages to families on steps they can take to reduce lead exposure. Ensure the EPA Lead Disclosure requirements are met.

4.9.6 Prohibit self-help activities that involve any disturbance of surfaces that may be coated with LBP.

5. DEFINITIONS:

5.1 Abatement: Means a comprehensive process of eliminating exposure or potential exposure to lead paint and lead dust through either removal, enclosure, or encapsulation.
Abatement must include testing, measures for worker protection, containment of dust and debris, cleanup and disposal of waste, and clearance testing.

5.2 Accessible, mouthable surfaces: Means an interior or exterior surface painted with lead-based paint that is accessible for a young child to mouth or chew.

5.3 Action Level: Means the point at which measures must be taken to reduce, control, or eliminate exposures to lead.

5.4 Child-occupied facility: Means a building, or portion of a building, constructed prior to 1978, visited by the same child, 6 years of age or under, on at least 2 different days within any week, provided that each days visit lasts at least 3 hours, the combined weekly visit lasts at least 6 hours, and the combined annual visits last at least 60 hours. The child-occupied facility may include, but are not limited to, day-care centers, preschools and kindergarten classrooms.

5.5 Target housing: Means any housing constructed prior to 1978, except housing for the elderly or persons with disabilities, or any 0-bedroom dwelling.

6. MANAGEMENT PLAN: The Holloman AFB LBPMP contains guidance for managing lead-based paint to ensure the availability of a trained and qualified workforce to identify and address lead-based paint hazards, and to protect the general public from exposure to hazards.

6.1 This plan is intended to ensure that individuals conducting lead-based paint inspections, risk assessments and abatements in target housing and child-occupied facilities are properly trained and certified, and that training programs providing instruction in such activities are accredited.

6.2 The Consumer Product Safety Act, restricted the amount of lead in paints manufactured after 27 February 1978 for sale directly to consumers and in paints to be used in residences, schools, hospitals, parks, playgrounds, public buildings, and other areas where consumers have direct access to painted surfaces (non-industrial facilities).

6.2.1 40 CFR 745 (EPA) and 24 CFR 35 (HUD) are regulations requiring disclosure of known lead-based paint and/or lead-based paint hazards by persons selling or leasing housing constructed prior to the phase out of residential lead-based paint use in 1978.

6.3 Government workers are covered by Occupational Safety and Health Administration (OSHA) Regulations.

6.3.1 29 CFR 1910.1025 Lead; This section applies to all occupational exposure to lead, except construction and agricultural which is covered by 29 CFR Part 1926.

6.3.2 29 CFR 1926.62 Lead; This section applies to all construction work where an employee may be occupationally exposed to lead.
6.4 Housing maintenance worker must follow EPA's training and certification rules. Toxic Substances Control Act (TSCA), Section 402/404.

6.4.1 Section 404/404 rule applies only to "target housing" and "child-occupied facilities" and only those activities which are considered to be abatement.

6.5 Lead in paints used in industrial facilities is not restricted by federal law.

6.5.1 At Holloman AFB all LBP contractors, and their workers, as well as government LBP workers will have current LBP certification before Lead-based paint abatement can proceed. The certification must be renewed annually.

6.5.2 Standard contracting bid packages must be developed with contracting language to inform contractors of the potential to create LBP hazards. It will be up to the project designers to determine where the hazards may exist and what steps the contractors must take to protect base personnel and families.

7. **MEDICAL SERVICES:** Air Force Policy and Guidance suggests a four-step approach to implementing LBP hazard identification activities on base: (1) medical screening, (2) visual facility inspection, (3) risk assessment, and (4) comprehensive facility survey.

7.1 Medical Screening: HAFB established a Childhood Blood Lead Surveillance Program in accordance with (IAW) USAF Policy letter dated 2 April 1993. In subsequent AFSPC HQ letters dated 12 September 1995 and 22 September 1995, HAFB was allowed to discontinue universal childhood blood lead level screening based on satisfying epidemiological criteria established by Armstrong Laboratory. Universal screening continued until October of 1996 when risk-based screening was initiated. Currently, Pediatric personnel recommend blood lead levels be ascertained under two conditions. First, the pediatrician may believe risk exists as determined by assessment of a questionnaire given at well-baby and other childhood check-ups. Second, the parents may request the determination of blood lead levels.

7.2 Visual Facility Inspections: Identification and mitigation of immediate LBP hazards is generally done by visual facility inspections to identify deteriorated painted surfaces, followed by quantitative testing to determine if the deteriorated surfaces contain lead (i.e., exceed HUD action level. The first activity satisfies Air Force policy and guidance on LBP in facilities by identifying facilities where hazards exist in the form of LBP in deteriorated condition. A tracking list was developed to include those high priority facilities inspected as part of initial surveys, Lead Exposure Risk Assessments (LERAs), or comprehensive surveys. The two types of facilities that were added to the list are those facilities that were: low priority with observable paint problems called in or noticed by work crews and high priority not included in the survey sampling process but reported by others. The list will contain all facilities that have been inspected/surveyed and those which contain the higher concentrations of LBP.

7.3 Risk Assessments: risk assessments determine the presence or absence of lead-based paint hazards and suggest appropriate hazard control measures. Only certified risk assessors
who should use standard forms can perform the assessment. To provide the necessary
guidance, a risk assessment must cover the following:

• Identification of the existence, nature, severity, source, and location of lead-based paint
  hazards (or documentation that no such hazards have been identified).

• Presentation of the various options for controlling lead hazards in the event that hazards
  are found, including interim controls, abatement measures, and any recommended
  changes to the management and maintenance systems.

7.4 Comprehensive facility survey: The quantification of the base LBP inventory is
accomplished through a comprehensive survey of facilities suspected of containing LBP,
generally following HUD procedures. This involves extensive quantitative testing on
selected groups of facilities that represent different types of building construction and
painting practices, and then extrapolating the results to establish where LBP, exists. This
LBPMP documents the specific strategy and plans for implementing near- and long-term in-
place management and abatement measures at HAFB. A comprehensive survey of high
priority facilities following HUD/Air Force guidelines was conducted to produce the
assessment necessary to prioritize in-place management and abatement action plans. The
quantitative estimates of LBP inventory is maintained by Bioenvironmental Engineering (49
ADOS/SGGFB) ref. par. 4.5.4 and par. 4.5.7. The LBPMP discusses what data needs to be
collected, how this information is used to prioritize action plans, the need to estimate the cost
of implementing those plans, and how the LBP inventory needs to be tracked as in-place
management and abatement actions are completed.
8. WASTE DISPOSAL:

8.1 Environmental regulations as promulgated by the Resource Conservation and Recovery Act (RCRA) require that demolition debris be characterized to determine proper disposal criteria. The Air Force has the responsibility to ensure that demolition debris, whether from entire structures or individual components from renovation projects, are disposed of properly. U.S. Army Corps of Engineers, Technical Letter 1110-x4, dated 15 January 1993, provides guidance for sampling appropriate waste streams, analyzing the samples by the toxic characteristic leaching procedure (TCLP), and properly transporting and disposing of the demolition debris.

8.2 Representative Structure/Component Sampling: In order to characterize waste for sampling, the project scope must be defined. A project scope can entail a demolition of a single structure or a group of structures, or it could also be a building renovation where certain components, such as windows, doors, or trim are removed. In either case, the waste (or waste stream) to be sampled must be representative of all the demolition debris. This includes, but is not limited to, doors, windows, glass, structural components, brick, roofing material, etc. of all demolished building components.

8.2.1 The sample submitted to the laboratory will be a composite sample of the entire waste stream of the structure to be demolished or renovated. Thus, a composite sample may consist of numerous individual samples of the waste stream. However, it is critical to make an accurate determination of the project prior to sampling.

8.2.2 The Toxicity Characteristic Leaching procedure (TCLP) test is used for the determination of lead or lead-contaminated material classification as hazardous waste. Specific TCLP laboratory analysis procedures are outlined in EPA regulation 40 CFR Part 261, Identification and Listing of Hazardous Waste. Lead or lead-contaminated waste is considered to be hazardous waste if TCLP laboratory analysis results indicate a concentration of lead equal to or greater than 5.0 milligrams per liter (ppm).

9. LEAD-BASED PAINT PROGRAM RECORD KEEPING:

9.1 Record Keeping: Accurate records maintained for all aspects of LBPMP include training and worker protection, LERA results, comprehensive LBP survey results, LBP test results in non-priority facilities, blood lead screening results, LTI results, maintenance records, abatement records, waste testing, and disposal.

9.1.1 Each shop supervisor that has personnel that could be exposed to LBP while performing their day to day task must ensure the personnel are trained in accordance with Occupational Safety and Health Administration (OSHA) and Environmental Protection Administration (EPA) regulations, their written Shop Operating Procedures (SOP) and this LBPMP. The supervisors of these shops must maintain the training and worker protection records. These shop supervisors must maintain the maintenance, abatement and disposal records of any LBP task done by their shop personnel. These records must be made available to the LBPPO upon request.
9.1.2 Bioenvironmental Engineering (49 ADOS/SGGFB) will maintain the record keeping database for the initial surveys and the Lead Exposure Risk Assessment (LERA), comprehensive LBP survey results, LBP test results in non-priority facilities, and waste stream testing with the results.

9.1.3 The records of Blood Lead Screening and Lead Toxicity Investigations will be maintained by Public Health (49 ADOS/SGGFM).

10. REFERENCES:


10.6 Center for Disease Control, Preventing Lead Poisoning in Young Children, October 1991.

10.7 42 CFR, Section 4822.

10.8 29 CFR, Section 1910-1926.

10.9 40 CFR, Section 50, 302.

10.10 EPA Environmental Fact Sheet, EPA Proposes National Training, Certification, Accreditation and Standards Program for Individuals and Firms Engaged in Lead-Based Paint Activities, September 1994.

10.11 Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint in Housing, June 1993.

10.12 HUD Lead-Based Paint Interim Guidelines for Hazard Identification in Public and Indian housing.