

TINKER AIR FORCE BASE LEAD-BASED PAINT ABATEMENT SPECIFICATIONS

REVISION DATE: 04-23-02

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PART A

GENERAL

The requirements for lead based paint abatement are stated herein. The drawings or statement of work associated with this project outline the work area which contains the lead based paint and the work to be accomplished. In case of a conflict between the drawings and the specifications, the specifications shall govern. The following regulations, their appendices, memorandums, guidelines, attachments and other pertinent documents which form a part of these regulations shall apply in their entirety.

1.1. U.S. Environmental Protection Agency (EPA), latest edition, 40 CFR Part 261 Identification and Listing of Hazardous Waste, 40 CFR Part 268 Land Disposal Restrictions.

1.2. Title 29 CFR Part 1910.134, Respiratory Protection (OSHA) latest edition; 29 CFR 1926.62, OSHA Lead Standard; Oklahoma Lead-based Paint Management Act Title 27A O.S.Supp.1994, Section 2-12-101.

1.3. Title 49 CFR, Part 172, Hazardous Materials Tables and Hazardous Materials Communications Regulations, latest edition.

1.4. Lead Based Paint: Interim Guidelines for Hazard Identification and Abatement in public and Indian Housing (HUD Guidelines).

1.5. The Lead Based Paint Contractor shall have in his possession, at the jobsite and in view, one copy of the Tinker AFB Lead Based Paint Abatement Specifications.

1.6. Where a conflict exists between the requirements of this specification and any of the above mentioned regulations, the most stringent shall be applicable.

1.7. All lead based paint contractors are encouraged to make a site visit to ensure familiarization with site conditions and the extent of the work requirements.

1.8. Health Warnings: Lead based paint contractors are warned that unprotected exposure to lead may result in damage to the blood, nervous system, kidneys, bones, heart, and reproductive system and contributes to high blood pressure. Care must be taken to avoid releasing or causing to be released, lead dust into the atmosphere. The Government assumes no liability for damages, personal injuries, illness, disabilities or death to the lead based paint contractor, the Contractor's employees, and other persons subject to the lead based paint contractor's control or to any other person including members of the general public, arising from, or incident to the purchase, use, disposition, subsequent operations performed on contact with or contributed to in any manner by the lead based paint contractor.

1.9. Quality Assurance: The lead based paint abatement contractor shall ensure all employees are knowledgeable of and comply with the procedures listed in this specification. The contractor shall notify

the Construction Inspector personnel between 0700 and 1600 hrs at least 24 hours in advance of work commencement and shall not begin work each day until a monitor from EM is on site. An exception letter will be served when the lead based paint abatement contractor is in non-compliance with the specifications and/or regulations. This letter will serve as a warning. The second exception letter sent for non-compliance with specifications and/or regulations will be cause, if so determined by the Government, for the contract to be terminated and bond to be forfeited.

1.10. Should the contractor employ non-English speaking workers then a translator furnished by the contractor shall be present at the project site when employee/employees are working.

1.11. Property Damage: The lead based paint contractor shall be responsible for all damages caused by or during the abatement. All damaged areas shall be restored to their original condition subject to approval by the Contracting Officer. Any repair or replacement shall be done at no cost to the Government.

PART B

DEFINITIONS

The following is a list of terms and definitions in this specification:

- 1.1. Abatement: Procedures to control dust release from lead containing materials. This includes removal and encapsulation.
- 1.2. Air Monitoring: The process of measuring the dust concentration of a specific volume of air over a specified period of time.
- 1.3. Airlock: An enclosure consisting of two polyethylene curtained doorways (3 sheets of plastic per doorway) at least 3 feet apart.
- 1.4. Authorized Visitor: Any representative of a regulatory or other agency having jurisdiction over the project (i.e. OSHA, EPA, Oklahoma Department of Health, Labor, contractor representative not on the job site full time, etc). Such visitor must immediately report to the Environmental Management or Bio-Environmental monitor on the job site and sign in/out in the daily log book. Furthermore, these visitors will not be allowed inside of the containment without documented proof of approved lead based paint abatement hazards and respirator fit tested.
- 1.5. Biological Monitoring: The analysis of a persons blood and/or urine, to determine the level of lead contamination in the body.
- 1.6. Clean Room: An uncontaminated area or room which is part of the worker decontamination enclosure with provisions for storage of workers street clothes and protective equipment.
- 1.7. Competent Person: One who has completed an approved EPA Lead Based Paint Abatement training course and who is capable of identifying existing and predictable hazards in the surroundings or working conditions and has authorization to take prompt corrective measures to eliminate the hazards.

- 1.8. Critical Barrier: Two (2) layers of six (6) mil plastic sheeting which covers all openings to prevent dust dispersal to other areas of the structure.
- 1.9. Decontamination Enclosure System: A series of connected rooms and airlocks used for the decontamination of workers and of materials and equipment (i.e. airlock, clean room, airlock, shower, airlock, dirty or equipment room, airlock, work area).
- 1.10. Demolition: The wrecking or taking out of any load supporting structural member.
- 1.11. Employee: Any person working for the lead based paint abatement contractor who physically engages in the abatement of lead based paint or performs a task on the job site.
- 1.12. Encapsulation: Involves resurfacing or covering surfaces and sealing or caulking with durable materials so as to prevent or control chalking, flaking lead containing substances from becoming dust.
- 1.13. Equipment Room: A contaminated room which is part of the worker decontamination enclosure system used for storage of contaminated clothing and equipment.
- 1.14. Exterior Work Area: An outdoor porch, stairway or other element of trim or walls on the exterior of the building.
- 1.15. Full Containment: An enclosure of the work area that is air tight, maintains negative air, contains a decontamination facility and has a load out area. Area sampling must comply with part E, subsection 1.6.2. and personal sampling must comply with part E, section 1.7.
- 1.16. HEPA Filter: A High Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97 percent of particles greater than 0.3 micrometers in diameter.
- 1.17. HEPA Vacuum Equipment: Vacuuming equipment with a HEPA filter system.
- 1.18. Landfill (approved): An EPA approved site for the disposal of lead containing materials and other hazardous wastes.
- 1.19. Lead Based Paint (LBP) Coated Surfaces: Any surface identified by the Government, by the use of portable direct reading X-Ray fluorescence (XRF) detector or other methods of analysis, including laboratory analysis that indicates a hazardous level of lead as specified in HUD Guidelines.
- 1.20. Lead Based Paint Abatement Contractor: A private entity certified in lead based paint abatement.
- 1.21. Lead Abatement Supervisor: The "Competent Person" on the project site, working for the contractor during the abatement, having experience in Lead Based Paint removal and air monitoring.

1.22. Mini-Containment: A mini-enclosure of the work area that maintains negative air, protects the area outside the mini-enclosure from contamination and is an alternative to other forms of abatement. Area sampling must comply with part E, subsection 1.6.2. and personal sampling must comply with part E, section 1.7.

1.23. Objects:

Fixed: Items which cannot be removed from the work area.

Moveable: Items which can be removed from the work area.

1.24. PEL (Permissible Exposure Limit/OSHA) 50 ug/m³ (50 micrograms of lead per cubic meter.) (OSHA Lead Standard 29 CFR 1910.1025).

1.25. Plasticize: To cover with 4 or 6 mil polyethylene sheeting.

1.26. Personal Protective Equipment (PPE): Disposable, impervious coveralls that are equipped with head and foot covers, gloves, and respirators.

1.27. Restricted Area: The area surrounding the work area demarcated by danger warning tape and signs. All personnel entering the restricted area must wear appropriate PPE.

1.28. Shower Room: A room between the clean room and equipment room in the worker decon enclosure with hot, cold, or warm running water suitably arranged for complete showering during decontamination. All waste water shall be collected in 55 gallon or smaller drums and held on site in designated secure area and disposed of IAW RCRA regs.

1.29. Substrate: A surface upon which paint or varnish has been or may be applied. Examples of substrate include wood, plaster, concrete, metal and drywall.

1.30. Trisodium Phosphate Solution (TSP): A mixture of at least one ounce of 5 percent trisodium phosphate to each gallon of water.

1.31. Wet Cleaning: The process of eliminating lead contamination by using cloths, mops, or other cleaning tools which have been dampened with TSP solution.

1.32. Work Area: A designated area where lead based paint is being abated. A contained work area is sealed, plasticized and equipped with a decontamination enclosure system. A non-contained work area is not equipped with a decontamination enclosure system but is demarcated by danger warning tape.

1.33. EM: Environmental Management

1.34. BE: Bio-Environmental Engineering

1.35. CE: Civil Engineering Directorate

PART C

PREABATEMENT SUBMITTALS

At least five (5) days prior to commencement of abatement work, the lead abatement contractor shall submit four (4) copies of each of all required abatement submittals to the Contracting Officer for review and/or approval by Environmental Management (EM). After completion of the submittal review, additional information may be required for clarification of or in support of documents submitted. Work will not commence until EM has approved all submittals, including employee certifications and physicals. Should any part of the submittal be disapproved, the entire submittal will be returned to the contractor until corrections are made. Required submittals include, but are not limited to the following:

1.1. Documentation of Training/Experience: All contractor employees (including prime and subcontractors - supervisors, foremen, workers, etc.) for this job shall have experience in lead based paint abatement and have successfully completed an EPA approved or equivalent (as per approved by EM) a Lead Based Paint Abatement training course. Copies of each employees certificate for this project must be current throughout the contract period and submitted prior to starting work. Certification shall indicate that workers have been trained in the health effects of lead poisoning, routes of exposure, personal hygiene, use and maintenance of protective equipment, engineering controls and good work practices. Certification shall also indicate that workers have also been fitted with personal respirators of the appropriate type for the work being done.

1.2. Employee Physicals: Be conducted in accordance with Occupational Safety and Health Administration (OSHA) and Lead Standard (29 CFR 1910.1025).

1.2.1. A medical and work history with special emphasis directed to the pulmonary, cardiovascular and gastrointestinal systems.

1.2.2. A physical examination directed to the pulmonary and gastrointestinal systems, including a chest roentgenogram to be administered at the discretion of the physician, and pulmonary function tests of forced vital capacity (FVC) and forced expiratory volume at one second (FEV).

1.2.3. Results of blood level tests for the purpose of establishing baseline blood lead levels for each worker involved in lead based paint surface preparation, abatement and the handling of lead based paint debris. Workers found to have blood lead levels greater than or equal to 30 micrograms/deciliter (30 mcg/dl) shall be prohibited from any work involving lead based paint.

1.2.4. Physician's Written Opinion: The employer shall obtain a written opinion from the examining physician. This written opinion shall contain the results of the medical examination to be included with submittals and shall include:

1.2.4.1. The physician's opinion as to whether the employee has any detected medical conditions that would place the employee

in an increased risk of material health impairment from exposure to lead.

1.2.4.2. Any recommended limitations on the employee or on the use of personal protective equipment including respirators.

1.2.4.3. A statement that the employee has been informed by the physician of the results of the medical examination and of any medical conditions that may result from lead exposure.

1.2.4.4. Exception: No medical examination is required of any employee if adequate records show that the employee has been examined in accordance with this paragraph within the past one year period. The physical must be current within the length of the contract.

1.3. Security Documentation: Work area and equipment must be secured at all times to ensure no unauthorized persons enter contaminated work or waste storage areas. Storage sites for equipment, supplies and lead contaminated waste must be pre-determined and approved by EM through the Contracting Officer prior to starting the lead based paint abatement. The contractor will submit to the Contracting Officer and EM a phone or pager number where the contractor supervisor or the competent person may be reached on the non-working days in case of an emergency.

1.4. Step-by-Step Abatement Procedures Plan: This plan applies to contained and non-contained abatement procedures for each distinct location. This plan of action shall include the proposed lead based paint surface preparation methods, removal techniques, type, size, and position of barriers and signs, debris accumulation, cleanup and disposal procedures.

1.5. Full containment construction procedures, including drawings. Drawings will show layout of the containment, decontamination unit, load-out area, location for negative air machines, structural design of the containment and materials used in the construction of the containment.

1.5.1. Decontamination unit construction procedures (floor plans, dimensions, materials, locations, plumbing, electrical connections and method for disposal of contaminated water).

1.5.2. Encapsulation procedures (method of encapsulation and location).

1.6. Respirator Protection Program: IAW OSHA 29 CFR, Section 1910.134 and ANSI Z88.2-80. Manufacturer's certification (including TC#) that all respiratory devices are NIOSH/MSHA approved.

1.7. Manufacturer's Certifications: HEPA vacuums, air purifying equipment, negative air pressure equipment and other local exhaust ventilation equipment must conform to ANSI Z-9.2-79.

1.8. Laboratory and Monitoring Qualifications:

1.8.1. The Lead Based Paint Abatement Contractor must use an independent laboratory for air monitoring and analysis support (see Part E, para 1.3 for required monitoring qualifications). The independent laboratory's on site industrial hygienist/qualified person must remain at the jobsite while the abatement is in progress. Should the contractor change independent laboratories while the contract is in progress, the contractor shall resubmit the qualifications/certifications of the new laboratory for approval by the Contracting Officer and EM prior to continuing work.

1.9. Lead Based Paint Waste Transporters Qualifications: If transportation of the waste is subcontracted, provide name, address, and phone number of subcontractor and documentation of lead based paint abatement workers' medical examinations. If the transporter is to be the abatement contractor's personnel, the contractor shall submit names for those specified personnel that will be loading or unloading the lead contaminated waste.

1.10. Materials List: Complete materials list of all items proposed to be furnished and used under the contract including any associated manufacturer's literature. Provide a separate list for rental equipment and written verification that the rental company has been notified that equipment is to be used for lead based paint abatement-related activities.

1.11. Work Schedule: Provide starting date, completion date, days to be worked (weekdays/weekends) and hours to be worked. If the abatement will be conducted at any time other than 0700 to 1600 hours, Monday through Friday, justification must be furnished and approved by the Contracting Officer and the EM Lead Based Paint Program Manager.

1.12. Any request for variance from this specification shall be in writing and submitted to the Contracting Officer and EM Lead Based Paint Program Manager at least ten (10) days in advance. Approval shall be at the discretion of the Contracting Officer and the EM personnel.

PART D

ABATEMENT MATERIAL REQUIREMENTS

1.1. Deliver all materials in their original unopened packages, containers or bundles bearing the name of the manufacturer and the brand name. Materials must be approved by the Contracting Officer and EM personnel before use.

1.2. Store all materials subject to damage off the ground and under cover to prevent damage or contamination. Material to be used on the project site shall not be stored in the same location where the lead contaminated waste is stored.

1.3. Damaged or deteriorating material shall not be used and shall be removed from the construction site immediately by the contractor. The cost of the removal or disposal shall be the responsibility of the contractor and at no cost to the Government.

PART E

AIR SAMPLING AND MONITORING

1.1. Air sampling data must include: sample volume, sampling times, sampling locations (with appropriate dimensions and sketches), evidence of periodic inspection of sampling equipment, documentation of pre and post calibration of equipment, detailed description of work conditions, and description of worker protective devices.

1.2. Laboratory analysis data must include sample identification; total sample duration, sample flow rate, total air volume and final analysis results must be recorded in micrograms per cubic meter (ug/m3).

1.3. All air sampling and monitoring shall be conducted by an industrial hygienist or an individual properly trained in air sampling and monitoring as determined and approved by the Contracting Officer and EM.

1.4. Preabatement Background Sampling: Prior to construction of abatement enclosure system, Bio-Environmental Engineering (BE) will conduct background sampling as outlined in HUD Guidelines.

1.5. Clearance Sampling: BE will collect or oversee collection of clearance wipe samples as outlined in HUD Guidelines. Clearance levels will be IAW HUD clearance criteria or preabatement sample concentration, whichever is more stringent.

1.6. Area Sampling:

1.6.1. Preabatement Background Sampling: Prior to construction of abatement enclosure system, the BE shall collect background wipe samples for every 1500 sq ft of work area, with at least (3) wipe samples per room or distinct area.

1.6.2. Each work shift, a minimum of one (1) area air sample shall be collected for each 1500 sq ft of work area or one sample for each restricted work area. The Industrial Hygienist for the project will be required to place their area sampling pumps in the containment. Sampling pumps will not be placed by Abatement workers. Area sample pumps will not be placed together or intentionally placed in locations away from the removal area.

1.6.3. If at any time the results of the air samples taken inside the containment by contractor's independent lab rise above the OSHA Permissible Exposure Limit (PEL) or the air samples taken by EM personnel outside of the containment exceed the EPA National Air Quality Standard, the abatement will stop immediately and clean down procedures will be required. Cleaning will continue until air sample results are below the current levels issued by OSHA and EPA.

1.6.4. Clearance Sampling (Residential): At least 24 hours after the final cleanup, EM will conduct wipe tests for the completed areas. Test results must indicate that the lead dust level in the tested areas are below the following allowable limits; Not to exceed: 200 micrograms per sq ft at the floors, 500 micrograms per

sq foot at the window sills and 800 micrograms per sq ft at the window wells. If the test results indicate higher levels, the contractor will conduct additional cleanup as specified and EM will retest the areas with the analysis of the sampling to be at the contractors expense. This procedure will be repeated until the allowable levels of dust is obtained. EM will only pay for the samples that pass clearance or preabatement background concentration. The contractor will pay for all other samples which do not pass clearance criteria.

1.6.5. Clearance Sampling (Industrial): At least 24 hours after the final cleanup, BE will conduct wipe tests for the completed areas. Test results must indicate that the lead dust level in the tested areas are below 800 micrograms per square foot. If the test results indicate higher levels, the contractor will conduct additional cleanup as needed and will retest the areas with the analysis of the sampling to be at the contractors expense. This procedure will be repeated until the allowable level of dust is obtained. EM will only pay for the samples that pass clearance or preabatement background concentration. If cleaning procedure only is required, the clearance level shall be 800 micrograms per square foot or less. The contractor shall pay for all other samples which do not pass clearance criteria.

1.7. Personal Sampling:

1.7.1. Personal Sampling: The Lead Based Paint Abatement Contractor shall conduct personal sampling at all times.

1.7.2. All personal samples must be taken at the breathing zones of persons who are performing lead based paint abatement. The closed face of the filter cassette must face downward during sampling.

1.7.3. Twenty-five percent of the contractor's abatement employees must be sampled per work shift in each work area. A minimum of two personal samples must be collected each shift from each work area. Blank samples shall be submitted to the laboratory along with personal samples. The Industrial Hygienist for the project will place pumps on employees to be sampled. Pumps will not be given to abatement workers to place on themselves. Should employee wearing sampling pump exit containment, the pump will be shut off, the time will be noted and a new cassette will be placed on the pump for re-entry.

PART F

RESPIRATORY PROTECTION

1. The Contractor shall implement a respiratory program IAW with 29 CFR 1910.134 and 1926.62.

PART G

CONTAINED WORK AREA PREPARATION

- 1.1. Construct abatement enclosure system(s) for each work area (see Part B para 1.14). The entrance to the enclosure(s) shall be outside the restricted area. Should lockable entry or exit doors be used for containment, a key to these doors shall be at the project site for emergency entry.
- 1.2. The abatement contractor shall post danger signs in the following manner:
 - 1.2.1. Except in emergency situations, at least three (3) days before removing or encapsulating lead paint, the contractor shall post signs immediately outside all entrances and exits to the work area.
 - 1.2.2. The contractor shall keep the signs posted until the EM inspector gives final clearance to the area.
 - 1.2.3. The signs will be at least 20 inch X 14 inch and indicate the date and place of the lead abatement project.
 - 1.2.4. The signs must include the phrase, "CAUTION LEAD HAZARD, KEEP OUT" in bold lettering at least two (2) inches high.
 - 1.2.5. Signs stating that no eating, drinking, or smoking in the work area shall also be posted.
- 1.3. Shut down electric power and lockout all circuit breaker boxes. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements.
- 1.4. Shut down and seal with two (2) layers of 6 mil plastic sheeting all openings, including heating, cooling, and ventilating air systems, to prevent dust dispersal to other areas. Plywood (3/8 inch minimum thickness) critical barriers are required to separate the work area from adjacent occupied areas.
- 1.5. Preclean moveable objects within the work area(s) using HEPA vacuum and/or wet cleaning methods. Removed decontaminated objects from work areas to a temporary location. Carpeting shall be thoroughly cleaned using HEPA vacuum. Carpet scheduled to be removed shall be disposed of as lead contaminated waste.
- 1.6. Preclean fixed objects within the work area(s) using HEPA vacuum equipment and/or wet cleaning methods. Plasticize all decontaminated fixed objects with 2 layers of 4 mil or greater plastic sheeting and duct tape to provide an air tight and water proof seal. Engineering controls shall be used to prevent overheating of pumps, electric motors, and other Government owned property within the containment when plastic is used to prevent contamination.
- 1.7. Preclean the proposed work area(s) starting at the ceiling and working down to the floor using HEPA vacuum and/or wet cleaning

methods. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

1.8. Cover floor with a minimum of two (2) layers of 6 mil plastic sheeting extending at least 12 inch up the walls and seal with duct tape. Then, cover walls and ceiling (when required) with two layers of 4 mil clear plastic sheeting overlapping the floor plastic by 12 inch and seal with duct tape. Blue chalk dust shall be applied between layers at all seams to detect water leaks. Exit routes shall be marked clearly within the work area.

PART H

EXTERIOR WORK AREA PREPARATION

1.1. The following methods are to be used for exterior abatement of buildings only.

1.1.1. Uncontained water blasting and open abrasive blasting are unacceptable methods of abatement.

1.2. Contractors who do not take proper containment measures and contaminate soil will be required to test, abate and dispose of soil contaminated with lead as a direct result of improper abatement methods.

1.3. For Liquid Waste:

1.3.1. Place polyethylene plastic sheeting (6 mil) as close to the building as possible. Extend the edge of the sheets a sufficient distance to contain the runoff and raise the outside edge of the sheets with 2x4's to trap liquid waste.

1.3.2. Have available appropriate containers to hold liquid waste for later transfer and disposal.

1.3.3. Where seams occur, they must be sealed with tape and edges must be raised (e.g. with 2x4 framing) and a new section of plastic sheeting and framing should be added as needed.

1.3.4. Liquid waste can be pumped, vacuumed or bailed for transfer to a 55 gallon or smaller drum for disposal.

1.4. For Dry Waste:

1.4.1. Place polyethylene plastic sheeting (6 mil) as close to the building as possible.

1.4.2. Extend the plastic sheeting out from the foundation a sufficient distance to contain waste and debris.

1.4.3. Weight the sheeting at the foundation and along the edges and seams.

1.4.4. Erect vertical shrouds if constant wind speed exceeds 15 mph or there is visible movement of debris beyond the ground sheeting.

1.4.5. The containment system must be kept intact for as long as needed. All tears and breaks must be repaired as they occur. Damaged floor sheeting shall be covered with new layers and not removed. In addition to routine repairs, the abatement contractor is responsible for inspecting the containment system on a daily basis or more often as needed to ensure its' integrity.

1.4.6. The use of manually operated abrasive blasting and vacuuming equipment may be used provided it does not release lead contaminated dust or grit to the surrounding ground or atmosphere.

1.4.7. The use of power tools and vacuuming may be used provided it does not release lead contaminated dust to the surrounding ground or atmosphere. Post blasting to remove residual dust is not permitted.

1.4.8. On a daily basis, as well as during final cleanup, the immediate area shall be examined visually to ensure that no lead debris has escaped containment. Any such debris shall be wet down and raked or swept and placed in single 6 mil or double 4 mil plastic bags, which shall then be sealed and stored along with other contaminated debris.

PART I

NON CONTAINED WORK AREA PREPARATION

1.1. Cordon off area with danger tape at least 50 feet, or a distance as determined by EM personnel, on all sides of the work area to restrict unauthorized access to the site during removal, clean-up or encapsulation processes. Proper danger signs shall be posted at the perimeter.

1.1.1. Construct critical barriers with two (2) layers of six (6) mil plastic sheeting, covering all openings which includes and shutting down (if possible) all heating, cooling and ventilating air systems, in order to prevent dust dispersal to other areas of the structure.

1.1.2. Preclean moveable objects within the work area(s) using HEPA vacuum and/or wet cleaning methods. Remove such objects from work area to a temporary location.

1.1.3. Preclean fixed objects within the work area(s) (IAW para 1.1) using HEPA and/or wet cleaning methods and tightly cover with two (2) layers of 4 mil or greater plastic sheeting.

1.1.4. Preclean the work area(s) using HEPA vacuum/wet cleaning methods. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

PART J

**CONTAINED WORK AREA REMOVAL PROCEDURES IN
HIGH PRIORITY FACILITIES**

- 1.1. Removal in high priority facilities:
 - 1.1.1. Contained Work Area:
 - 1.1.2. Visually inspect enclosures at the beginning of each work period. Repair damaged barriers and remedy defects immediately upon discovery.
 - 1.1.3. Perform a daily wet cleaning of any area outside the work or restricted area which becomes contaminated with dust or debris as a consequence of work performed on that day.
 - 1.1.4. Should areas outside the work area become contaminated with lead-containing dust or debris as a consequence of the abatement employees' work practices, the abatement contractor shall be responsible for cleaning these areas in accordance with the procedures outlined in this specification at no additional cost to the Government.
 - 1.1.5. Start the HEPA filtered negative air pressure system and maintain a pressure of -0.02 inches of water. The contractor will be required to have a manometer in each negative pressure containment. Do not deactivate without EM approval. One backup HEPA filtered negative air pressure system must be installed in the work area to provide backup support in case of equipment failure. Each negative pressure system must be equipped with an audible alarm and an electronic mechanism which shuts off the system in the event of a filter breach or absence of a filter.
 - 1.1.6. High RPM power equipment, pressure washers, sandblasting equipment, or hydroblasters will not be used outside of a containment. Containment structure must be constructed and maintained to prevent the possibility of lead contaminated dust, sand, or water to be released from the containment.
 - 1.1.7. The contractor shall inform BE and the Contracting Officer immediately if a health hazard is created during the abatement. This includes, but is not limited to, such occurrences as breaching the containment area, air monitoring results indicating airborne lead dust concentrations at unacceptable levels, accidents, etc.
 - 1.1.8. Remove all lead containing material identified in Section 1 (Statement of Work) of this specification. Material drop shall not exceed 15 feet. For heights from 15-50 feet, provide inclined chutes or scaffolding to intercept drop. For heights exceeding 50 feet, provide enclosed air tight chutes.
 - 1.1.9. During the abatement, periodic cleanup and bagging of lead containing waste materials is required. Removed materials shall be double bagged in 4 mil plastic or single 6 mil plastic bags and sealed (e.g. doors, windows, trim, etc.)

1.1.10. After completion of lead based paint removal, HEPA vacuum all surfaces to remove visible lead-containing material. Surfaces shall be cleaned with a 5 percent trisodium phosphate solution and HEPA vacuumed again. All lead contaminated liquid waste will be collected in 55 gallon or smaller drums for proper disposal. Discharge shall not be disposed of onto the ground, into a storm drain, or industrial waste line.

PART K

DECONTAMINATION/CLEAN-UP

1.1. Cleanup materials (including mopheads), clothing and all other disposable materials used in the work area shall be double bagged in 4 mil, or single 6 mil plastic bags and sealed for disposal as lead-contaminated waste.

1.1.1. Inner most layer of plastic must be HEPA vacuumed and wet wiped and visually inspected by EM before removal. Carefully fold plastic in upon itself while removing. Place debris in double 4 mil or single 6 mil plastic bags and seal. Plastic sheeting used to isolate contaminated rooms from non contaminated rooms should not be removed at this time.

1.1.2. Before removal of floor plastic, it should be sprayed and HEPA vacuumed. Remove floor plastic from the corners and fold to the middle while removing to trap any remaining lead dust. Place into double 4 mil or single 6 mil plastic bags and seal.

1.1.3. After the plastic has been removed from the contaminated area, the entire area should be HEPA-vacuumed starting with the area farthest from the entrance to avoid retracking dust through an already-cleaned area. In each area, vacuuming should begin with the ceilings and proceed down the walls, including doors and door trim, windows, window sills, wells, trim, baseboards etc.

1.1.4. The entire affected area shall be washed down with a 5 percent Trisodium Phosphate solution working from the ceiling down. After the 5 percent TSP solution washdown, the entire area shall be HEPA vacuumed again.

1.1.5. After the preliminary final cleanup effort is completed, an inspector from EM will visually inspect the entire affected area to ensure that all surfaces requiring abatement have been addressed and all visible dust and debris have been removed.

1.1.6. If the results of the visual inspection are unsatisfactory, affected surfaces must be reabated and/or cleaned in accordance with the BE and the Contracting Officer's instructions until satisfactory results are achieved.

1.1.7. After the affected area passes the final visual inspection, a 24 hour settling period will be required prior to clearance wipe sampling. If any of the clearance wipe sample results exceed the clearance criteria, the area will be recleaned and BE will again conduct clearance wipe sampling at the

contractors expense. This procedure will be repeated until clearance criteria are met.

1.1.8. After passing the final clearance standards as established by EM, the contractor may continue with the painting or sealing of abated surfaces. Final layer of plastic must be sprayed with lockdown and removed at this time. During removal of final layer of floor plastic, HEPA vacuum the area under the floor plastic as it is being removed to clean up any debris that may have breached the containment.

1.1.9. After painting/sealing is completed, the final cleanup can take place. The entire area will be HEPA vacuumed, washed down with the 5 percent TSP solution and HEPA vacuumed again. Walls and ceiling surfaces newly painted with latex paint are exempted from the final washdown due to the danger of staining or otherwise damaging the final painted surface, but should be HEPA vacuumed again.

1.1.10. Following the final cleaning, an inspector from EM will conduct a final visual inspection. If the area does not pass a final visual inspection, it will be recleaned until it passes.

PART L

DISPOSAL

1.1. The abatement contractor will notify EM personnel in advance of the date and time that lead contaminated waste will be transported.

1.2. To prevent exceeding available storage capacity on site, sealed and labeled containers of contaminated waste periodically shall be removed and transported to the disposal site.

1.3. A completed generator label will be placed on each bag, drum, and wrapped component before transporting to the landfill site.

1.4. Upon the completion of documented analytical testing on all generated waste, all regulated lead contaminated waste shall be disposed of at an authorized site in accordance with regulatory requirements of the EPA, RCRA, NPDES and applicable state and local guidelines and regulations.

1.5. Loading lead contaminated waste shall not begin until EM personnel are present at the site. Wet wipe all containers in work area prior to transfer to load-out. Wet wipe containers again in load-out area prior to transfer to disposal vehicle.

1.6. Personnel loading and unloading lead contaminated waste from the abatement enclosure shall enter the load-out from outside. No one shall use the load-out as a means to leave or enter the work area.

1.7. Drums/bags of lead contaminated waste and wrapped lead contaminated components that have been removed from the work area shall be transported directly to an EPA approved disposal site. Temporary storage of lead contaminated waste at an intermediate location is not

permitted except under special authorization from EM and the Contracting Officer.

1.8. Lead contaminated waste transported in an open truck or trailer must be in 6 mil bags within sealed drums. Drums must be secured to prevent movement and shall not be loaded higher than the sidewalls of the vehicle.

1.9. The cargo area of the truck shall be free of debris and lined and sealed with 6 mil plastic to prevent vehicle contamination.

1.10. Large structural lead containing components shall be loaded and secured prior to loading bags. Do not throw items into truck cargo area.

1.11. Any lead containing dust observed on containers or surfaces outside the work area shall be immediately cleaned using HEPA filtered vacuuming equipment and/or wet cleaning methods.

PART M

POSTABATEMENT SUBMITTALS

1.1. Within 10 working days after completion of work, and prior to release from contract obligations with the U.S. Air Force, the abatement contractor shall provide the Contracting Officer:

1.1.1. A signed receipt from the waste disposal site operator stating date, time, and amount (cubic yards) of lead contaminated waste received.

1.1.2. A signed copy of all air sampling results from samples collected during the contract (see Part E, Air Sampling and Monitoring).

1.1.3. Written verification from the rental company that equipment was decontaminated by the contractor prior to return.

PART N

HAZARDOUS PROPERTY DISCLAIMER

The Government cautions that lead containing materials, substances, or component parts thereof, which are being removed under this contract exhibit hazardous or toxic properties. The Government assumes no liability for any damage to the property of the Lead Based Paint Abatement Contractor; any person or public property, or for the personal injuries, illness, disabilities, or death to the Lead Based Paint Contractor or his employees, any other person subject to the contractors control or any other person including members of the general public, arising from, or incident to, the purchase, use, processing, disposition, or any subsequent operation performed upon, exposure to or contact with any component, part, constituent or ingredient of this item, or substance or material whether intentional or accidental. The Lead Based Paint Abatement Contractor agrees to hold harmless and indemnify the Government for any and all costs and expenses

incurred incident to any claim, suit, demand, judgment, action, debt, liability costs and attorney's fees or any other request for moneys or any other type of relief arising from or incident to the purchase, use, processing, disposition, subsequent operation performed upon, exposure to, or contact with any component, part, constituent, or ingredient of this item, material, or substance, whether intentional or accidental.