

\*\*\*\*\*  
USACE / NAVFAC / AFCEA / NASA UFGS-02 83 19.00 10 (April 2006)  
-----  
Preparing Activity: USACE Replacing without change  
UFGS-13281A (August 2003)

## UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated 9 October 2006

\*\*\*\*\*

### SECTION TABLE OF CONTENTS

#### DIVISION 02 - EXISTING CONDITIONS

#### SECTION 02 83 19.00 10

LEAD BASED PAINT HAZARD ABATEMENT, TARGET HOUSING & CHILD OCCUPIED FACILITIES

04/06

#### PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 DEFINITIONS
- 1.3 DESCRIPTION OF WORK
  - 1.3.1 Protection of Existing Areas To Remain
  - 1.3.2 Coordination with Other Work
- 1.4 SUBMITTALS
- 1.5 QUALIFICATIONS
  - 1.5.1 Qualifications and Organization Report
  - 1.5.2 Personnel and Subcontractor Responsibilities and Qualifications
    - 1.5.2.1 Certified Abatement Supervisor
    - 1.5.2.2 Lead Hazard Abatement Workers
    - 1.5.2.3 Certified Risk Assessor
    - 1.5.2.4 Testing Laboratories
- 1.6 REGULATORY REQUIREMENTS
- 1.7 OCCUPANT PROTECTION PLAN
- 1.8 LICENSES, PERMITS AND NOTIFICATIONS
- 1.9 TRAINING
- 1.10 SAMPLING AND ANALYSIS
  - 1.10.1 Dust Wipe Materials, Sampling and Analysis
  - 1.10.2 Soil Sampling and Analysis
  - 1.10.3 Clearance Monitoring
- 1.11 CLEARANCE REQUIREMENTS
- 1.12 MATERIALS AND EQUIPMENT
  - 1.12.1 Abrasive Removal Equipment
  - 1.12.2 Negative Air Pressure System
    - 1.12.2.1 Minimum Requirements
    - 1.12.2.2 Auxiliary Generator
  - 1.12.3 Vacuum Systems
  - 1.12.4 Heat Blower Guns
  - 1.12.5 Chemical Paint Strippers
  - 1.12.6 Chemical Paint Stripper Neutralizer
  - 1.12.7 Detergents and Cleaners
- 1.13 EXPENDABLE SUPPLIES
  - 1.13.1 Polyethylene Bags

- 1.13.2 Polyethylene Leak-tight Wrapping
- 1.13.3 Polyethylene Sheeting
- 1.13.4 Tape and Adhesive Spray
- 1.13.5 Containers

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

- 3.1 WORK PROCEDURES
  - 3.1.1 Lead Hazard Control Areas, Equipment and Procedures
  - 3.1.2 Lead Hazard Control Areas
  - 3.1.3 Negative Air Pressure System Containment
- 3.2 FURNISHINGS
- 3.3 LEAD-BASED PAINT ABATEMENT METHODS AND TECHNIQUES
- 3.4 CLEARANCE PROCEDURES
  - 3.4.1 Visual Inspection
  - 3.4.2 Analytical Demonstration of Clearance
  - 3.4.3 Clearance
- 3.8 ABATEMENT REPORT
- 3.6 CERTIFICATION OF VISUAL INSPECTION

-- End of Section Table of Contents --

\*\*\*\*\*  
USACE / NAVFAC / AFCEA / NASA UFGS-02 83 19.00 10 (April 2006)  
-----  
Preparing Activity: USACE Replacing without change  
UFGS-13281A (August 2003)

## UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated 9 October 2006

\*\*\*\*\*

### SECTION 02 83 19.00 10

#### LEAD BASED PAINT HAZARD ABATEMENT, TARGET HOUSING & CHILD OCCUPIED FACILITIES 04/06

\*\*\*\*\*

NOTE: This guide specification covers the requirements for abatement of lead based paint hazards in target housing and child occupied facilities.

Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification. A listing of technical proponents, including their organization designation and telephone number, is on the Internet.

Recommended changes to a UFGS should be submitted as a Criteria Change Request (CCR).

Use of electronic communication is encouraged.

Brackets are used in the text to indicate designer choices or locations where text must be supplied by the designer.

\*\*\*\*\*

#### PART 1 GENERAL

\*\*\*\*\*

NOTE: To assure protection of workers and proper disposal of lead based paint, this guide specification is to be used together with Section 01 35 29 SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS and Section 02 83 13.00 20 LEAD IN CONSTRUCTION.

This guide specification is not to be used for removal of lead-based paint from hydraulic structures, steel structures, or other similar structures. For these types of structures, the designer should use Section 09 97 02 PAINTING: HYDRAULIC STRUCTURES.

\*\*\*\*\*

## 1.1 REFERENCES

\*\*\*\*\*

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

\*\*\*\*\*

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

### AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z9.2 (2001) Fundamentals Governing the Design and Operation of Local Exhaust Ventilation Systems

### ASTM INTERNATIONAL (ASTM)

ASTM E 1613 (2004) Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES), Flame Atomic Absorption Spectrometry (FAAS), or Graphite Furnace Atomic Absorption Spectrometry (GFAAS) Techniques

ASTM E 1644 (2004) Hot Plate Digestion of Dust Wipe Samples for the Determination of Lead

ASTM E 1726 (2001) Preparation of Soil Samples by Hotplate Digestion for Subsequent Lead Analysis

ASTM E 1727 (2004) Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques

ASTM E 1728 (2003) Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination

ASTM E 1792 (2003) Wipe Sampling Materials for Lead in Surface Dust

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 701 (2004) Fire Tests for Flame Propagation of  
Textiles and Films

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

HUD 6780 (1995; Errata Aug 1996; Rev Ch. 7 - 1997)  
Guidelines for the Evaluation and Control  
of Lead-Based Paint Hazards in Housing

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 745 Lead-Based Paint Poisoning Prevention in  
Certain Residential Structures

UNDERWRITERS LABORATORIES (UL)

UL 586 (1996; Rev thru Apr 2000) High-Efficiency,  
Particulate, Air Filter Units

1.2 DEFINITIONS

a. Abatement - Measures defined in 40 CFR 745, Section 223,  
designed to permanently eliminate lead-based paint hazards.

b. Target Housing - Residential real property which is housing  
constructed prior to 1978, except housing for the elderly or  
persons with disabilities (unless any one or more children age 6  
years or under resides or is expected to reside in such housing  
for the elderly or persons with disabilities) or any 0 bedroom  
dwelling.

c. Child-occupied Facility - Real property which is a building or  
portion of a building constructed prior to 1978 visited regularly  
by the same child, 6 years of age or under, on at least two  
different days, provided that each day's visit lasts at least 6  
hours, and the combined annual visits last at least 60 hours.  
Child-occupied facilities include but are not limited to, day-care  
centers, preschools and kindergarten classrooms.

d. Lead-Based Paint Hazards - Paint-lead hazard, dust-lead hazard  
or soil-lead hazard as identified in 40 CFR 745, Section 65.

1.3 DESCRIPTION OF WORK

\*\*\*\*\*  
NOTE: Show the lead-based paint abatement  
activities and pertinent control techniques at  
appropriate places on project drawings. Enter the  
required work task information on the INDIVIDUAL  
WORK TASK DATA ELEMENT sheets at the end of this  
section.  
\*\*\*\*\*

The work covered by this section includes work tasks, on the individual  
work task data sheets at the end of this section, and the precautions  
specified in this section for the protection of building occupants and the

environment during and after the performance of lead hazard abatement activities.

#### 1.3.1 Protection of Existing Areas To Remain

All project work including, but not limited to, lead hazard abatement work, storage, transportation, and disposal shall be performed without damaging or contaminating adjacent work and areas. Where such work or areas are damaged or contaminated, the Contractor shall restore work and areas to the original condition.

#### 1.3.2 Coordination with Other Work

The Contractor shall coordinate lead hazard abatement activities with work being performed in adjacent areas. Coordination procedures shall be explained in the Contractor's Accident Prevention Plan and shall describe how the Contractor will prevent lead exposure to other Contractors and/or Government personnel performing work unrelated to lead hazard abatement activities.

#### 1.4 SUBMITTALS

\*\*\*\*\*

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

\*\*\*\*\*

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for [Contractor Quality Control approval.] [information only. When used, a designation following the "G"

designation identifies the office that will review the submittal for the Government.] The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-03 Product Data

##### Materials and Equipment Expendable Supplies

A description of the materials, equipment and expendable supplies required; including Material Safety Data Sheets (MSDSs) for material brought onsite to perform the work.

##### Qualifications[; G][; G, [\_\_\_\_]]

A report providing evidence of qualifications and designating responsibilities for personnel and laboratories.

##### Occupant Protection Plan[; G][; G, [\_\_\_\_]]

The occupant protection plan for approval, as specified.

#### SD-06 Test Reports

##### Pressure Differential Log Licenses, Permits, and Notifications[; G][; G, [\_\_\_\_]]

The continuously monitored pressure differential log, as specified. Certification that licenses, permits, and notifications have been obtained as required.

##### Sampling and Analysis[; G][; G, [\_\_\_\_]]

A log of the analytical results from sampling conducted during the abatement. The log of results shall be kept current with project activities and shall be briefed to the Contracting Officer as analytical results are reported.

##### Abatement Report[; G][; G, [\_\_\_\_]]

Report written by the certified supervisor covering each element in 40 CFR 745, Section 227 (e) (10).

### 1.5 QUALIFICATIONS

#### 1.5.1 Qualifications and Organization Report

The Contractor shall furnish a qualification and organization report. The report shall describe the qualifications of the certified supervisor, certified risk assessor, and certified abatement workers. The report shall include an organization chart showing the Contractor's personnel by name and title and project specific responsibilities and authorities. The report shall describe the qualifications of the laboratories selected for this project. The report shall be signed by the Contractor and the certified abatement supervisor to indicate that all personnel and laboratories comply with certification and experience requirements of this section and that project personnel have been given the authority to complete the tasks assigned to them.

## 1.5.2 Personnel and Subcontractor Responsibilities and Qualifications

### 1.5.2.1 Certified Abatement Supervisor

The abatement supervisor shall be certified pursuant to 40 CFR 745, Section 226 and is responsible for development and implementation of the occupant protection plan, the abatement report and shall supervise lead hazard abatement work activities.

### 1.5.2.2 Lead Hazard Abatement Workers

Lead hazard abatement workers shall be certified pursuant to 40 CFR 745, Section 226 and shall be responsible for performing the labor necessary to complete the lead hazard abatement activities required in this contract.

### 1.5.2.3 Certified Risk Assessor

The Certified Risk Assessor shall be certified pursuant to 40 CFR 745, Section 226 and shall be responsible to perform the clearance sampling, clearance sample data evaluation and shall summarize clearance sampling results in a section of the abatement report. The risk assessor shall sign the abatement report to indicate clearance requirements for the contract have been met.

### 1.5.2.4 Testing Laboratories

The laboratory selected to perform analysis on dust wipe, paint chip and soil samples shall be recognized by the EPA's National Lead Laboratory Accreditation Program (NLLAP).

## 1.6 REGULATORY REQUIREMENTS

\*\*\*\*\*  
NOTE: This specification section is based on EPA 40  
CFR 745, Section 227 requirements. The designer  
will need to research and specify the requirements  
of any other state, local or installation  
regulations that may affect lead hazard abatement  
activities specific to this project.  
\*\*\*\*\*

The following State and local statutes, regulations and requirements apply to lead hazard abatement activities to be performed: State, [\_\_\_\_], Local [\_\_\_\_].

## 1.7 OCCUPANT PROTECTION PLAN

The certified supervisor shall develop and implement an Occupant Protection Plan describing the measures and management procedures to be taken during lead hazard abatement activities to protect the building occupants/building facilities and the outside environment from exposure to any lead contamination while lead hazard abatement activities are performed.

## 1.8 LICENSES, PERMITS AND NOTIFICATIONS

\*\*\*\*\*  
NOTE: Consult with the customer, district  
engineering, construction and safety offices and all  
outside regulatory authorities (EPA, state, county,



city) having jurisdiction over any part of the project to determine whether a license or permit is required and who is responsible for submitting required notifications to various agencies. The designer then must make the decision if the required permits are to be obtained by the Contractor or the Government. If the Contractor is to provide the permits, include this paragraph and choose the appropriate bracketed items. If the Government is to obtain the permits/licenses, delete this entire paragraph.

\*\*\*\*\*

The Contractor shall certify in writing to the [Regional Office of the EPA] [state's environmental protection agency responsible for lead hazard abatement activities] [\_\_\_\_\_] [and the Contracting Officer] at least [10] [\_\_\_\_\_] days prior to the commencement of work that [\_\_\_\_\_] licenses, permits and notifications have been obtained. The Contractor is responsible for all associated fees or costs incurred in obtaining the licenses, permits and notifications.

#### 1.9 TRAINING

Training to meet 40 CFR 745 Subpart L requirements shall be provided by an EPA accredited training provider and the Contractor shall provide proof in the Qualifications and Organization Report showing that personnel have passed certification examinations for their respective disciplines, that fees for certification have been paid to the EPA (or to the state for state-run programs) and that EPA has certified the supervisor, risk assessor, workers to perform their duties.

#### 1.10 SAMPLING AND ANALYSIS

\*\*\*\*\*

NOTE: Specify the sampling and analysis necessary to characterize effectiveness of equipment and procedures to prevent migration of contamination while lead hazard abatement activities are performed and to assure clearance/cleanup requirements have been achieved.

Select from the methods below to specify the sampling and analytical requirements for this project.

\*\*\*\*\*

##### 1.10.1 Dust Wipe Materials, Sampling and Analysis

Sampling shall conform to [[ASTM E 1728] [ASTM E 1792]]. [Analysis shall conform to ASTM E 1613 and ASTM E 1644].

##### 1.10.2 Soil Sampling and Analysis

Sampling shall conform to ASTM E 1727. [Analysis shall conform to ASTM E 1613 and ASTM E 1726].

##### 1.10.3 Clearance Monitoring

\*\*\*\*\*

NOTE: Review 40 CFR 745 (e)(8)(v)(A), (B) and (C) to determine the quantity and location of clearance samples for target housing, child occupied facilities.

\*\*\*\*\*

- a. The Contractor shall take dust wipe samples inside the lead hazard control area after the final visual inspection in the quantities and at the locations specified.

- (1) Floors [\_\_\_\_\_].
- (2) Interior Window Sills [\_\_\_\_\_].
- (3) Window Troughs [\_\_\_\_\_].

- b. The Contractor shall take exterior bare soil samples inside the lead hazard control area after the final visual inspection in the quantities and at the locations specified.

- (1) Near the building foundation [\_\_\_\_\_].
- (2) Nearby Play areas [\_\_\_\_\_].

#### 1.11 CLEARANCE REQUIREMENTS

\*\*\*\*\*

NOTE: Clearance criteria are as follows:

Target housing and child occupied facilities.

a) Building Interior:

Floors - 40 micrograms/square foot.  
Interior Window Sills - 250 micrograms/square foot.  
Window Troughs - 800 micrograms/square foot.

b) Building Exterior:

Bare soils in play areas used by children under the age of 6 - 400 mg/kg.  
Bare soils, all other areas - 1200 mg/kg

It is recommended that the designer check with the project customer and state regulators to assure that the clearance criteria in this note are consistent with customer needs and state specific requirements.

\*\*\*\*\*

Target housing and child occupied facilities clearance levels.

- (1) Floors [\_\_\_\_\_].
- (2) Interior Window Sills [\_\_\_\_\_].
- (3) Window Troughs [\_\_\_\_\_].
- (4) Bare soils in play areas accessible by children [\_\_\_\_\_].
- (5) Bare soils in all other areas [\_\_\_\_\_].

#### 1.12 MATERIALS AND EQUIPMENT

Materials and equipment needed to complete the project, shall be available and kept on the site.

### 1.12.1 Abrasive Removal Equipment

The use of powered machine for vibrating, sanding, grinding, or abrasive blasting is prohibited unless equipped with local exhaust ventilation systems equipped with high efficiency particulate air (HEPA) filters.

### 1.12.2 Negative Air Pressure System

\*\*\*\*\*

NOTE: Negative Air Pressure Systems are typically required only for projects using powered floor sanding or abrasive blasting techniques. Both techniques may have application for historical restoration, but are not typically used as lead hazard abatement techniques. Remove the following two paragraphs if negative air pressure systems are not necessary for the project.

\*\*\*\*\*

#### 1.12.2.1 Minimum Requirements

Work shall not proceed in the area until containment is set up and HEPA filtration systems are in place. The negative air pressure system shall meet the requirements of ANSI Z9.2 including approved HEPA filters per UL 586. Negative air pressure equipment shall be equipped with new HEPA filters, and shall be sufficient to maintain a minimum pressure differential of minus 0.005 kPa 0.02 inch of water column relative to adjacent, unsealed areas. Negative air pressure system minimum requirements are listed below:

- a. The unit shall be capable of delivering its rated volume of air with a clean first stage filter, an intermediate filter and a primary HEPA filter in place.
- b. The HEPA filter shall be certified as being capable of trapping and retaining mono-dispersed particles as small as 0.3 micrometers at a minimum efficiency of 99.97 percent.
- c. The unit shall be capable of continuing to deliver no less than 70 percent of rated capacity when the HEPA filter is 70 percent full or measures 0.625 kPa 2.5 inches of water static pressure differential on a magnehelic gauge.
- d. The unit shall be equipped with a manometer-type negative pressure differential monitor with minor scale division of 0.005 kPa 0.02 inch of water and accuracy within plus or minus 1.0 percent. The manometer shall be calibrated daily as recommended by the manufacturer.
- e. The unit shall be equipped with a means for the operator to easily interpret the readings in terms of the volumetric flow rate of air per minute moving through the machine at any given moment.
- f. The unit shall be equipped with an electronic mechanism that automatically shuts the machine off in the event of a filter breach or absence of a filter.
- g. The unit shall be equipped with an audible horn that sounds an alarm when the machine has shut itself off.

- h. The unit shall be equipped with an automatic safety mechanism that prevents a worker from improperly inserting the main HEPA filter.

#### 1.12.2.2 Auxiliary Generator

An auxiliary generator shall be provided with capacity to power a minimum of 50 percent of the negative air machines at any time during the work. When power fails, the generator controls shall automatically start the generator and switch the negative air pressure system machines to generator power. The generator shall not present a carbon monoxide hazard to workers.

#### 1.12.3 Vacuum Systems

Vacuum systems shall be suitably sized for the project, and filters shall be capable of trapping and retaining all mono-disperse particles as small as 0.3 micrometers (mean aerodynamic diameter) at a minimum efficiency of 99.97 percent. Used filters that are being replaced shall be disposed in a proper manner.

#### 1.12.4 Heat Blower Guns

Heat blower guns shall be flameless, electrical, paint-softener type with controls to limit temperature to 590 degrees C 1,100 degrees F. Heat blower shall be DI (non-grounded) 120 volts ac, and shall be equipped with cone, fan, glass protector and spoon reflector nozzles.

#### 1.12.5 Chemical Paint Strippers

Chemical paint strippers shall not contain methylene chloride and shall be formulated to prevent stain, discoloration, or raising of the substrate materials.

#### 1.12.6 Chemical Paint Stripper Neutralizer

Neutralizers for paint strippers shall be compatible with the substrate and suitable for use with the chemical stripper that has been applied to the surface.

#### 1.12.7 Detergents and Cleaners

Detergents or cleaning agents shall not contain trisodium phosphate and shall have demonstrated effectiveness in lead control work using cleaning techniques specified by HUD 6780 guidelines.

### 1.13 EXPENDABLE SUPPLIES

#### 1.13.1 Polyethylene Bags

Disposable bags shall be polyethylene plastic and shall be a minimum of 0.15 mm 6 mils thick (0.1 mm 4 mils thick if double bags are used) or any other thick plastic material shown to demonstrate at least equivalent performance; and shall be capable of being made leak-tight. Leak-tight means that solids, liquids or dust cannot escape or spill out.

#### 1.13.2 Polyethylene Leak-tight Wrapping

Wrapping used to wrap lead contaminated debris shall be polyethylene plastic that is a minimum of 0.15 mm 6 mils thick or any other thick

plastic material shown to demonstrate at least equivalent performance.

#### 1.13.3 Polyethylene Sheeting

Sheeting shall be polyethylene plastic with a minimum thickness of 0.15 mm 6 mil, or any other thick plastic material shown to demonstrate at least equivalent performance; and shall be provided in the largest sheet size reasonably accommodated by the project to minimize the number of seams. Where the project location constitutes an out of the ordinary potential for fire, or where unusual fire hazards cannot be eliminated, flame-resistant polyethylene sheets which conform to the requirements of NFPA 701 shall be provided.

#### 1.13.4 Tape and Adhesive Spray

Tape and adhesive shall be capable of sealing joints between polyethylene sheets and for attachment of polyethylene sheets to adjacent surfaces. After dry application, tape or adhesive shall retain adhesion when exposed to wet conditions, including amended water. Tape shall be minimum 50 mm 2 inches wide, industrial strength.

#### 1.13.5 Containers

When used, containers shall be leak-tight and shall be labeled in accordance with EPA, DOT and OSHA standards.

### PART 2 PRODUCTS (NOT APPLICABLE)

### PART 3 EXECUTION

#### 3.1 WORK PROCEDURES

The Contractor shall perform work following practices and procedures in project work plans and the occupant protection plan.

##### 3.1.1 Lead Hazard Control Areas, Equipment and Procedures

The Contractor shall set up lead hazard control areas and operate equipment within the lead hazard control area in a manner that will minimize migration of lead dust beyond the lead hazard control area boundaries.

##### 3.1.2 Lead Hazard Control Areas

\*\*\*\*\*

NOTE: The necessary dust control requirements and lead dust migrations control features of the lead hazard control area depend on the level of dust generated by lead hazard control activities and post lead hazard control building use.

Select containment options below based on guidance in Tables 8.1, 8.2 and 8.3 in Chapter 8 of the HUD Guidelines for target housing and child occupied facilities.

\*\*\*\*\*

Access into lead hazard control areas by the general public shall be prohibited. Lead hazard control area preparation and restriction requirements follow:

- a. Containment features for interior lead hazard control projects:  
[Polyethylene sheeting sealed with spray adhesive and duct tape]  
[Portable plastic partitions] [Colored caution tape] [\_\_\_\_\_] to  
designate the lead hazard control area. The floor in the lead  
hazard control area shall be covered with [two] [\_\_\_\_\_] layers of  
polyethylene sheeting. [The entry/exit shall be sealed with a  
primitive air lock] [Openings, such as HVAC supply and return air  
vents, into the lead hazard control area shall be sealed with  
polyethylene sheeting and duct tape or with sealed rigid  
coverings].
- b. Containment features for exterior lead hazard control projects:  
[Plastic sheeting] [Portable partitions] [Colored caution tape]  
[\_\_\_\_\_] [A roped-off boundary perimeter, using caution tape or a  
barrier installed at [\_\_\_\_\_] distance from where the lead control  
work is performed].

### 3.1.3 Negative Air Pressure System Containment

\*\*\*\*\*  
**NOTE: Require containment to be equipped with  
negative air pressure control equipment specified in  
paragraph NEGATIVE AIR PRESSURE SYSTEM and operated  
as specified below if lead hazard control activities  
require blasting or power sanding techniques to  
remove lead. Remove this paragraph if not required  
in the project.**  
\*\*\*\*\*

- a. The negative air pressure systems shall be operated to provide at  
least [10] [\_\_\_\_\_] air changes per hour inside the containment.  
The local exhaust unit equipment shall be operated continuously  
until the containment is removed. The negative air pressure  
system shall be smoke tested for leaks at the beginning of each  
shift. The certified supervisor is responsible to continuously  
monitor and keep a [pressure differential log](#) with an automatic  
manometric recording instrument. The Contracting Officer shall be  
notified immediately if the pressure differential falls below the  
prescribed minimum. The building ventilation system shall not be  
used as the local exhaust system. The local exhaust system shall  
terminate out of doors unless the Contracting Officer allows an  
alternate arrangement. All filters shall be new at the beginning  
of the project and shall be periodically changed as necessary to  
maintain specified pressure differential and shall be disposed of  
as lead contaminated waste.
- b. Discontinuing Negative Air Pressure System. The negative air  
pressure system shall be operated continuously during abatement  
activities unless otherwise authorized by the Contracting Officer.  
At the completion of the project, units shall be run until full  
cleanup has been completed and final clearance testing  
requirements have been met. Dismantling of the negative air  
pressure systems shall [conform to written decontamination  
procedures] [be approved by the Contracting Officer] [be as  
presented in the Lead Hazard Control Plan]. The HEPA filter  
machine intakes shall be sealed with polyethylene to prevent  
environmental contamination.

### 3.2 FURNISHINGS

\*\*\*\*\*  
NOTE: Delete this paragraph if not applicable to the project. It is the designer's responsibility to identify in this paragraph the furnishings to be removed.  
\*\*\*\*\*

The Contractor shall remove furniture and equipment from the work area before lead hazard control work begins.

### 3.3 LEAD-BASED PAINT ABATEMENT METHODS AND TECHNIQUES

\*\*\*\*\*  
NOTE: Consult the risk assessment report and Chapter 12: Abatement in the U.S. Department of Housing and Urban Development's "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" to determine the abatement techniques to apply to lead-based paint hazards. Specify the abatement methods and techniques to be applied to building components or landscape features on the work task data element sheets at the end of this section.  
\*\*\*\*\*

Lead based paint abatement techniques for building components and landscape features are specified on the individual work task data element sheets at the end of this section.

### 3.4 CLEARANCE PROCEDURES

\*\*\*\*\*  
NOTE: Select the optional "independent risk assessor" requirements if applicable to the project.  
\*\*\*\*\*

#### 3.4.1 Visual Inspection

The certified supervisor shall perform a visual inspection, using the form at the end of this section, to assure that lead hazard abatement activities, identified in the individual work task data elements, have been properly completed. The certified supervisor shall visually verify that lead hazards have been abated and the area is free of dust and paint chips generated by lead hazard abatement activities.

#### 3.4.2 Analytical Demonstration of Clearance

After the visual inspection, the [certified risk assessor] [independent certified risk assessor] shall take clearance samples for laboratory analysis to verify clearance requirements specified in paragraph CLEARANCE REQUIREMENTS have been met.

#### 3.4.3 Clearance

The certified risk assessor shall review analytical results for the samples taken to determine compliance with project specific clearance requirements. The following actions apply and shall be performed at the Contractor's

expense if project specific clearance levels are exceeded:

Reclean surfaces.  
Retest to determine clearance.

### 3.8 ABATEMENT REPORT

The following information shall be covered in the abatement report:

- a. Start and completion dates of lead hazard control activities.
- b. The name and address of each firm conducting lead hazard control activities and the name of each supervisor assigned to the project.
- c. The Occupant Protection Plan prepared pursuant to paragraph OCCUPANT PROTECTION PLAN.
- d. The name, address and signature of the certified risk assessor to indicating clearance requirements have been met.
- e. Certification of each Final Cleaning and Visual Inspection performed by the certified supervisor.
- f. The results of clearance testing and all soil analyses, and the name of each laboratory that conducted the analyses.
- g. A detailed written description of the lead abatement including abatement methods used, locations of rooms and/or components where lead abatement activities occurred, reason for selecting particular abatement methods for each component, and any suggested monitoring of encapsulants or enclosures.
- h. Hazardous waste disposal documentation.
- i. Contractor provided installation/maintenance manuals.

### 3.6 CERTIFICATION OF VISUAL INSPECTION

The Contractor shall certify that the lead hazard control area(s) for each individual work task data elements have passed visual clearance criteria and are ready for clearance sampling. To pass visual clearance, lead hazards have to be removed; control technology appropriately applied/installed; the lead hazard control area must be free from visible dust debris, paint chips or any other residue that may have been generated by the lead hazard control activities.



Signature by the certified supervisor indicates that the described lead hazard control area(s) have passed visual clearance criteria. Provide detailed description of each Lead Hazard Control Area.

---

---

---

BY: \_\_\_\_\_  
Certified Supervisor Date

Print name and title \_\_\_\_\_

#### CONTRACTING OFFICER ACCEPTANCE OR REJECTION

The Contracting Officer hereby determines that the Contractor has performed visual inspection of the lead hazard control area and by quality assurance inspection, finds the Contractor's work to be:

\_\_\_\_\_ Acceptable, ready for performance of clearance sampling

\_\_\_\_\_ Unacceptable, Contractor instructed to re-clean the lead hazard control area

BY: Contracting Officer's Representative

\_\_\_\_\_  
Signature Date

Print name and title \_\_\_\_\_

Lead Hazard Control Clearance Sampling Certification Form

Date\_\_\_\_\_

Name of Certified Risk

Assessor\_\_\_\_\_

License No.\_\_\_\_\_

Work Task Data Element \_\_\_\_\_

Sample quantity and location:

Windows \_\_\_\_\_

Floors \_\_\_\_\_

Exterior Soils \_\_\_\_\_

Date of sample collection\_\_\_\_\_Date Shipped to lab\_\_\_\_\_

Shipped by\_\_\_\_\_

Signature

I certify that the clearance samples taken meet the clearance sampling requirements of this contract.

By:\_\_\_\_\_

Date:\_\_\_\_\_

Certified Risk Assessor

Print name and Title:\_\_\_\_\_

CONTRACTING OFFICER ACCEPTANCE OR REJECTION

I have inspected sampling locations and procedures and have found them to be

\_\_\_\_\_Acceptable, meet contract requirements.

\_\_\_\_\_Unacceptable, do not meet contract requirements, Contractor is directed to resample.

By: Contracting Officer's Representative

Signature

Date

Print Name and Title\_\_\_\_\_

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet \_\_\_\_\_ of \_\_\_\_\_

There is a separate data sheet for each individual work task.

WORK TASK DESIGNATION NUMBER: \_\_\_\_\_

1. LOCATION OF WORK TASK:
2. BRIEF DESCRIPTION OF THE ABATEMENT ACTIVITY:

-- End of Section --