



RFQ No. DACW67-02-Q-0066

**US Army Corps  
of Engineers®**  
Seattle District

AMENDMENT NO. 0001

---

**Project: PAINT GENERATOR BAY**

**Location: ALBENI FALLS DAM, OLDTOWN, IDAHO**

**CONSTRUCTION SOLICITATION  
AND SPECIFICATIONS**

**Closing Date: 6 MAY 2002**  
**Closing Time: 11:00 AM LOCAL TIME**

**REMARKS: Quotes may be faxed to (206) 764-6817, Attention: Susan Newby, or mailed to US Army, Corps of Engineers, Seattle District, Attention: Susan Newby, P.O. Box 3755, Seattle, WA 98124-3755.**

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE OF PAGES 1   25
2. AMENDMENT/MODIFICATION NO. 0001		3. EFFECTIVE DATE 29-Apr-2002	4. REQUISITION/PURCHASE REQ. NO. W68MD9-2107-6632	5. PROJECT NO.(If applicable)
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755		CODE DACW67	7. ADMINISTERED BY (If other than item 6) CODE  <b>See Item 6</b>	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)			X	9A. AMENDMENT OF SOLICITATION NO. DACW67-02-Q-0066
			X	9B. DATED (SEE ITEM 11) 23-Apr-2002
				10A. MOD. OF CONTRACT/ORDER NO.
				10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE			
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended.				
<p>Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods:</p> <p>(a) By completing Items 8 and 15, and returning <u>  1  </u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.</p>				
12. ACCOUNTING AND APPROPRIATION DATA (If required)				
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>				
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.				
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).				
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
D.OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SEE ATTACHED CONTINUATION SHEET  POC: SUSAN NEWBY (206) 764-6780				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) SUSAN F NEWBY / CONTRACT SPECIALIST	
15B. CONTRACTOR/OFFEROR  _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED  30-Apr-2002

## SECTION SF 30 BLOCK 14 CONTINUATION PAGE

- a. The purpose of this amendment is to revise Section 01000 and Section 02090 of the solicitation, and to extend the Closing date and Time to Monday, 6 May 2002, 11:00AM PST.
- b. The attached and revised Section 01000 is hereby incorporated and replaced herein, and changes to the Section are indicated as follows:
  - 1) Lines that are lined across the letters/numbers indicate that they are deleted from the Section.
  - 2) Underlined words/number indicate that they have been added to the Section.
- c. The attached and revised Section 02090 is hereby incorporated and replaced herein.
- d. There are no other changes as a result of this amendment.
- e. Potential contractors must acknowledge this amendment by signing the Standard Form (SF) 30, Amendment of Solicitation/Modification of Contract, and submit to this office with the bid documents before the closing date and time.

## SECTION C Descriptions and Specifications

## SECTION 01000

STATEMENT OF WORK  
PAINT GENERATOR BAY  
ALBENI FALLS DAM  
OLDTOWN, IDAHO

~~April 10, 2002~~ April 29, 2002

DESCRIPTION OF WORK: The Contractor shall provide all plant, labor, equipment and materials and perform all work in strict accordance with contract specifications and this Statement of Work. The Contractor shall provide all plant, labor, and materials to remove paint coatings- as required; clean, prepare and paint surfaces within the generator bay. The base contract is for the surface area of the walls, between tile base and crane railing (approx 25,000 sf), with an option of the ceiling, (approx. 22,000 sf) and a separate option of the generator enclosures and accompanying appurtenances (approx. 80,000sf). Work is intended to provide overcoatings of existing paint. All references to generator enclosures, within this statement of work and contract, shall apply to the generator enclosures, exciter enclosure cages, piping, railing, [stairs](#) and associated appurtenances unless otherwise noted

Area Description: Project is located at Albeni Falls Dam, Oldtown, Idaho. Construction is to take place on the 3rd floor of the powerhouse in the generator bay. This work will require cleaning, preparation and painting of surfaces within the generator bay. The surface area awarded as the base bid item will be the walls within the bay. Surface area of the walls between the 8 foot tile base and below the crane railing (approx 25,000 sf). Two options that may be exercised as part of the contract at time of award are 1) the ceiling and 2) generator enclosures with appurtenances. Work involves surface preparation of areas which may have an underlying coating of lead based paint. These surfaces should not be disturbed in such a way as to release lead into the powerhouse environment. This work may require minimal removal of existing paint coatings. [Heights for walls and ceiling are in excess of 30 feet. Heights for generator enclosures and appurtenances are in excess of 8 feet.](#)

Special care shall be taken in the following areas as detailed below:

All items are anticipated to have a coating of carbon dust as a result of the wear of the slip rings in the generators in addition to ordinary dirt or dust. As such, the Contractor shall ensure that the surfaces to be painted are free from all dirt and dust residue. Solution to be used for cleaning of surfaces shall be mild and non-abrasive. Spray application [of paints](#) will not be allowed in this project due to potential contamination of electrical and mechanical equipment. The Contractor shall ensure that the operation of the generators and all equipment in this area is not hampered either directly or indirectly by the Contractor's operations. [The Contractor will be responsible for any expenses to equipment caused by Contractor's actions. The generator bay is a working area, as such the Contractor shall ensure that the area is well ventilated during application of cleaners and paint. The Contractor shall ensure that those working in the vicinity shall not be negatively impacted by fumes of the substances being used as part of this contract.](#)

The elements of work to be accomplished at this location included in the Base Bid Item area as follows:

**BID ITEM 001**

## 1. Cleaning, Preparation and Painting of Wall Surfaces in Generator Bay

- 1.1. Cleaning of Wall Surface: The Contractor shall ensure that all areas intended for painting are cleaned with a mild, non-abrasive solution. The solution shall not cause peeling, chipping or deterioration of the existing paint surface.

[1.1.1. The crane railing shall be cleaned in accordance with 1.1 of this statement of work.](#)

- 1.2. Surface Preparation: The Contractor shall prepare the surface intended for painting as recommended by the paint manufacturer. Preparation shall not cause peeling, chipping or deterioration of the existing paint surface.

1.2.1. Fill all manmade holes and cracks on the walls to provide a smooth and even surface for paint adherence. Caulking shall be in accordance with applicable specifications and the paint manufacturer's recommendations.

1.2.2. All wall expansion joints shall be caulked prior to painting. Caulking shall be in accordance with applicable specifications and accept the paint coatings. Caulking material shall not cause the paint to sheet or decrease paint's performance.

1.2.2.1. Caulking material shall perform as intended with the walls movement. The Contractor shall ensure that placement of the material is straight and shall not deviate outside of the existing joint. Material shall blend with the wall's surface and paint coatings shall adhere to its surface.

- 1.3. Painting: The Contractor shall paint in accordance with the applicable specifications and the types of paint as specified herein. Use of spray equipment will not be allowed due to negative impacts to electrical and mechanical equipment within the generator bay.

- 1.3.1. Areas to be painted are the wall surface. Care shall be taken not to paint the tile base. Any paint remnants on the tile base or other surfaces shall be removed with the manufacturers recommended paint remover for the material.
- 1.3.2. Type of paint used shall be a [polyurethane enamel with hardener Exterior 100% Acrylic, semi-gloss](#) by Columbia Paint Coatings, Product number [04 400 01-242](#) WB or an approved equal. [Minimum of 2 coats shall be applied in accordance with manufacturers recommendations.](#)
- 1.3.3. Colors shall be as specified by the authorized Corps of Engineers representative.

**OPTIONAL ITEM 001****2. Cleaning, Preparation and Painting of Ceiling Surfaces in Generator Bay**

- 2.1. Cleaning of Ceiling Surface: The Contractor shall ensure that all areas intended for painting are cleaned with a mild, non-abrasive solution. The solution shall not cause peeling, chipping or deterioration of the existing paint surface
- 2.2. Surface Preparation: The Contractor shall prepare the surface intended for painting as recommended by the paint manufacturer. Preparation shall not cause peeling, chipping or deterioration of the existing paint surface.
- 2.3. Painting: The Contractor shall paint in accordance with applicable specifications and the types of paint as specified herein. Use of spray equipment will not be allowed due to negative impacts to electrical and mechanical equipment within the generator bay.
  - 2.3.1. Type of paint used shall be a [polyurethane enamel with hardener Exterior 100% Acrylic, semi-gloss](#) by Columbia Paint Coatings, Product number [04 400 01-242](#) WB or an approved equal. [Minimum of 2 coats shall be applied in accordance with manufacturers recommendations.](#)
  - 2.3.2. Colors shall be as specified by the authorized Corps of Engineers representative.

**OPTIONAL ITEM 002****3. Cleaning, Preparation and Painting of Generator Enclosures and Associated Appurtenances in Generator Bay**

- 3.1. Lead Based Paint: It is anticipated that the generator enclosures have an original factory coating of lead based paint. The Contractor shall do everything possible not to impact this original coat. If the Lead Based Paint is disturbed, the Contractor shall adhere to all state, local and federal regulations in dealing with this impact. The area impacted shall be contained to the smallest square area possible and repaired. Upon completion of repair - the area shall be cleaned, prepared and painted in accordance with this Statement of Work.
- 3.2. Cleaning of Generator Enclosures and Associated Equipment: The Contractor shall ensure that all areas intended for painting are cleaned with a mild, non-abrasive solution. The solution shall not cause peeling, chipping or deterioration of the existing paint surface
- 3.3. Surface Preparation: The Contractor shall prepare the surface intended for painting as recommended by the paint manufacturer. Preparation shall not cause peeling, chipping or deterioration of the existing paint surface.
  - 3.3.1. The exterior surface of each generator enclosure shall be prepared to ensure paint adhesion to pre-existing paint coatings.
  - 3.3.2. Preparation of the surface shall not impact any coatings other than the top layer.
- 3.4. Painting: The Contractor shall paint in accordance with applicable specifications and the types of paint as specified herein. Use of spray equipment will not be allowed due to negative impacts to electrical and mechanical equipment within the generator bay.
  - 3.4.1. Type of paint used shall be a polyurethane enamel with hardener by Columbia Paint Coatings, Product number 04 400 [DB](#) or an approved equal.
  - 3.4.2. Colors shall be as specified by the authorized Corps of Engineers representative.

**4. Site Clean Up**

- 4.1. All debris shall be removed from site.
- 4.2. During cleaning of surfaces the Contractor shall ensure that the work site is from excessive water and remains passable for facility users.
- 4.3. Any drip or adhesion onto surfaces shall be removed as soon as possible in order to ensure that more rigorous methods of removal are not required. Removal of the paint shall be in accordance with the manufacturer's recommendation for the type of paint and material. Care shall be taken not to adversely impact the color of the coating surface impacted.

## 5. PRE-SOLICITATION SITE VISIT, DRAWINGS AND SPECIFICATIONS

- 5.1. It is highly recommended that all solicitors attend the scheduled pre-solicitation site visit prior to bidding the contract to access the area and requirements of work.
- 5.2. Drawings: No drawings.
- 5.3. Specifications: This work is governed by the contract technical specifications.

01000	STATEMENT OF WORK
01025	PAYMENT
01061	ENVIRONMENTAL PROTECTION
01300	SUBMITTAL PROCEDURES
01400	CONTRACTOR QUALITY CONTROL
01700	AS-BUILTS, RECORDS, O&M MANUALS, AND WARRANTY OF CONSTRUCTION
02090	LEAD-BASED PAINT (LBP) ABATEMENT AND DISPOSAL
07920	JOINT SEALING
09900	PAINTING, GENERAL

## 6. CONSTRUCTION PHASING AND RESTRICTIONS: The following phasing and restriction related issues may affect the work.

### 6.1. Work Coordination:

- 6.1.1. Work schedule must be coordinated with the facility representative. Facility work hours are Monday to Thursday, 6:30 am to 5:00 pm.
- 6.1.2. The Contractor shall interface with facility occupants. The work shall be planned and accomplished so that there shall be a minimum of interference and inconvenience to the staff. Do not block any building driveways, access routes, or exits without prior coordination with and approval from the operating manager.
- 6.1.3. The Contractor shall attend a pre-work meeting presided by the Corps of Engineers (C.O.E.), Project Lead prior to commencing construction activities. The Contractor shall contact the C.O.E. Project Lead within 5-days of issuance of contract NTP to establish a date and time for the pre-work meeting. The contractor shall submit a construction schedule and a Work Plan (as described below) at that meeting for government approval unless the government has previously approved these items. The schedule shall be in sufficient detail to identify all aspects of the work including outages, and tie-ins to the electrical system. The schedule shall show project tasks with duration and start and finish times.

### 6.2. Construction Restrictions:

- 6.2.1. The Contractor shall adhere to the security requirements of this facility.
- 6.2.2. The Contractor will be required to work within the Limits of the Project Safe Clearance Procedures including lock-out or tag-out of equipment as necessary. [Facility equipment \(crane\) may be available for use in this contract, but is not guaranteed.](#)
- 6.2.3. The Contractor shall observe all local, state, and federal regulations while performing this contract and all construction will meet or exceed applicable industry standards.
- 6.2.4. The Contractor will be responsible for obtaining any permits, approvals, or licenses required to perform the work.
- 6.2.5. U.S. Army Corps of Engineers, Safety and Health Requirements Manual, EM 385-1-1 shall be considered a part of this contract and will be enforced as such.

## 7. CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

- 7.1. The Government shall make available to the Contractor, from existing outlets and supplies, reasonable amounts of potable water without charge. The Contractor shall carefully conserve potable water furnished. The Contractor, at their own expense, shall install and maintain necessary temporary connections and distribution lines and shall remove the connections and lines prior to final acceptance of construction.
- 7.2. Subject to available supply, the Government, without charge, shall make reasonable amounts of electric current available to the Contractor for performing work at the work area. The Contractor shall carefully conserve electricity furnished. The

Contractor at their own expense shall install and maintain necessary temporary connections and distribution lines and shall remove the connections and lines prior to final acceptance of construction.

- 7.3. The Contractor shall provide portable toilet facilities for the use of his personnel on site.
- 7.4. A staging area shall be provided for the contractor as directed by the COR.
- 7.5. Work shall be performed between the hours of 6:30 AM and 5:00 PM Monday through Friday unless an alternate work schedule is approved by the COR.
- 7.6. The Contractor is responsible for security of his own property and security of government property when construction activities affect existing security measures.

8. SUBMITTALS:

- 8.1. All items listed below or required per the contract specification shall be submitted for review or approval as indicated. Any proposal deviations to the design shall be submitted for approval prior to installation. ENG Form 4025 shall accompany all submittals.

<u>Source</u>	<u>Activity</u>	<u>Submittal</u>
SOW	Project Schedule (Government Approval prior to construction start).	Schedule/Bar Chart, Schedule of Values
SOW	Work Plan (Government Approval prior to construction start)	Hazard Analysis Identification of definable features of work Site specific safety plan Subcontractor List Methods of performance Quality Control Plan
09000	Painting, General	Manufacturer's data/cut sheets, manufacturer's system recommendations, detail drawings, samples

9. CONTRACT COMPLETION REQUIREMENTS:

- 9.1. The Contractor shall provide the items indicated below to the ACO prior to contract completion:

CONTRACT COMPLETION REQUIREMENT	YES	NO
As-builts		√
1354		√
Equipment-In-Place List		√
O & M Manuals		
Mechanical O & M		√
Electrical O & M		√
Other O&Ms - Painted Surfaces	√	

10. PERFORMANCE PERIOD:

- 10.1. The Contractor shall be required to commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed and complete all work under the Base Bid Item of this contract, including final cleanup of the premises, within 45 calendar days after Notice to Proceed.
- 10.2. Any Optional Bid Items that will be included in this project shall be awarded within 10 days of the Notice To Proceed for the Base Bid Item. The Contractor shall be required to commence work on Optional Bid Items within 10 calendar days after the date the Contractor receives the notice to proceed for the Optional Bid Item. All options, if exercised, shall be completed not later than 90 days after Notice to Proceed for the Base Bid Item.

11. POINTS OF CONTACT:

- 11.1. Send all correspondence (including invoices and certified payrolls) to:

U.S. Army Corps of Engineers  
 Small Projects Office  
 ATTN: Nilo Bonifacio  
 PO Box 92146  
 Tillicum, WA 98429 - 0146

- 11.2. Project lead:  
 Brandi Dennis-Peña  
 (206) 764-6757 or (253) 966-4372

11.3. Quality Assurance Representative:

Marshall Fisher  
(406) 541-4848 Office

(406) 360-4593 Cell

SECTION 02090

LEAD-BASED PAINT (LBP) ABATEMENT AND DISPOSAL

PART 1 GENERAL

1.1 REFERENCES

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

CODE OF FEDERAL REGULATIONS (CFR)

- .. 29 CFR 1910 .....Occupational Safety and Health Standards
- .. 29 CFR 1926 .....Safety and Health Regulations for Construction
- 40 CFR 260 .....Hazardous Waste Management System: General
- .. 40 CFR 261 .....Identification and Listing of Hazardous Waste
- .. 40 CFR 262 .....Standards Applicable to Generators of Hazardous Waste
- .. 40 CFR 263 .....Standards Applicable to Transporters of Hazardous Waste
- .. 40 CFR 264 .....Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- .. 40 CFR 265 .....Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- .. 40 CFR 268 .....Land Disposal Restrictions
- .. 49 CFR 172 .....Hazardous Material Table, Special Provisions, Hazardous Material Communications, Emergency Response Information, and Training Requirements

..... ENGINEERING MANUALS (EM)

- EM 385-1-1 .....(1992) U.S. Army Corps of Engineers Safety and Health Requirements Manual

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- NFPA 701 .....(1989) Methods of Fire Test for Flame-Resistant Textiles and Films

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

- NIOSH OSHA .....Lead in Construction  
Booklet 3142

UNDERWRITERS LABORATORIES (UL)

- UL 586 .....(1990) High-Efficiency, Particulate, Air Filter Units

WASHINGTON ADMINISTRATIVE CODE (WAC)

- WAC 296-155-173.....Lead, 12 Dec 93

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01300 SUBMITTAL DESCRIPTIONS:

SD-01 Data

Equipment List; GA.

A list of equipment items to be used in the work, including brand names, model, capacity, performance characteristics, quantities and other pertinent information.

#### SD-08 Statements

##### Lead-Based Paint (LBP) Inventory; GA.

A space-by-space inspection of the area to be abated per the Order shall be conducted with the Contracting Officer. A written inventory shall be prepared that identifies the LBP containing surfaces. Areas and materials identified as containing LBP shall be treated unless the Contractor provides analytical evidence stating that the materials are not contaminated with LBP. If the inventory identifies additional LBP contamination, the Contractor shall make an amendment to the inventory. Costs of sampling and analysis to verify or add to the Contractor's LBP Inventory shall be borne by the Contractor and approved by the Contracting Officer in advance.

##### Lead-Based Paint (LBP) Management Plan; GA.

The Contractor shall review specified abatement work tasks and abatement methods and shall prepare a detailed LBP Management Plan that identifies the work procedures, health, and safety measures to be used in LBP abatement. The plan shall address the various sources of lead and the methods to be undertaken to abate the lead hazards to include the following key elements:

- ..... a. Location of LBP containing components keyed to project drawings.
- ... b. Abatement methods for each LBP containing component.
- ... c. Means for notifying occupants of proposed work schedules.
- ... d. Training requirements as required by Federal, state, and local regulations.
- ... e. Unique problems associated with the LBP abatement project.
- ....f. Sketch of LBP control areas and decontamination areas.
- ... g. Eating, drinking, smoking, and rest room procedures.
- ... h. Sequencing of LBP related work.
- ....i. Personnel protective equipment; respiratory protection program and controls.
- ....j. Engineering controls, containment structures and safety measures.
- ....k. Worker exposure assessment procedures.
- ....l. Work Practice controls.
- ...m. Housekeeping.
- ... n. Hygiene facilities and practice.
- ... o. Medical surveillance, including medical removal protection.
- ... p. Sampling, testing and analytical methods to include personal air sampling requirements of 29 CFR 1926 Section.62 and when specified or where required, environmental air sampling, dust wipe sampling (preabatement, during abatement, post abatement), soil sampling (preabatement, post abatement, final clearance), toxicity characteristic leaching procedure (TCLP) of the waste material in accordance with 40 CFR 261. Procedures must include frequency, locations, and sampling and analytical methods to be used.

##### Emergency Contingency Plan; FIO.

An emergency contingency plan shall be prepared in accordance with 40 CFR 261. Procedure must address the following LBP abatement hazards as appropriate to the project:

- ... a. Negative air pressure system failure.
- ... b. Major breach of containment barriers.
- ... c. Detection of unexpected lead levels on adjacent grounds.
- ... d. Spilling of lead debris bags or containers.

... e. Phone numbers for project manager, local fire, police and medical personnel.

Hazardous Waste Management Plan; GA.

A Hazardous Waste Management Plan shall be prepared that complies with applicable requirements of Federal, state, and local hazardous waste regulations and addresses:

..... a. Identification or documentation of potential hazardous wastes associated with the work.

... b. Estimated quantities of wastes to be generated and disposed of.

... c. Names and qualifications of each Contractor that will be transporting, storing, treating, and disposing of the wastes; the facility location, phone number, and name of a 24-hour point of contact shall be included. Two copies of EPA, state, and local hazardous waste permit applications, permits, and EPA identification numbers.

... d. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous waste.

.. e. List of waste handling equipment to be used in performing the work to include cleaning, volume reduction, and transport equipment.

...f. Spill prevention, containment, and clean-up contingency measures to be implemented.

.. g. Work plan and schedule for waste containment, removal, and disposal. Waste shall be cleaned up and containerized daily.

.. h. Cost for hazardous waste disposal according to this plan.

Waste Handling and Site Storage Plan; GA.

A Handling and Site Storage Plan shall be prepared that addresses the handling and storage of LBP debris in accordance with the requirement of 40 CFR 262 and 40 CFR 265. The Contractor shall confirm that an EPA identification number has been obtained so that proper manifesting of the waste will be addressed, and that site storage limitations, including the time of storage, container requirements, contingency plan, and personnel training have been complied with.

Waste Disposal Plan; GA.

A Waste Disposal Plan shall be prepared that will include but not be limited to the following:

.... a. A written confirmation that the debris will be treated and disposed of in accordance with the requirements of 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 264 and 40 CFR 268.

.. b. A written confirmation that transportation of the debris will be in accordance with 40 CFR 263.

.. c. Waste subcontractor's name, address, telephone number, and landfill location, including copies of licenses and signed agreements.

.. d. Landfill name, address, and telephone number. A copy of the landfill's state and locally issued license, and a signed agreement that the landfill will accept the LBP wastes.

.. e. Detailed delivery tickets prepared, signed, and dated by an agent of the landfill, certifying the amount of LBP containing materials delivered to the landfill, within 3 days after delivery.

..... SD-09 Reports

Sampling Result; GA.

A daily log of the personal and environmental air sampling test results shall be reviewed by the Certified Industrial Hygienist (CIH) and submitted, in written form, no more than 48 hours after completion of the sampling cycle. The log shall list each sample result, sampling time and date, sample type, identification of personnel monitored, flow rate and duration, air volume sampled, yield of lead, cassette size, analytical method used, analyst's name and company, and interpretation of results. Results shall be reported in micrograms of lead per cubic meter of air. In addition, the daily log shall include the results of dust wipe samples, soil samples and TCLP sampling including each phase of preabatement, during abatement and final clearance. Documentation of results that exceed specified limits (personal air samples that exceed 30 micrograms per cubic meter) or as required by Federal, state or local requirements shall be highlighted in the log in such a manner to make them easily distinguishable from monitoring results that do not exceed specified or regulatory limits.

..... SD-13 Certificates

Quality Assurance; GA.

Certificates shall meet the requirements of paragraph QUALITY ASSURANCE. The statements shall be signed and dated by a certifying officer after the award of this contract and contain the following:

- ..... a. Contractor's name and address.
- ..... b. Project name and location.
- ..... c. The specified requirements that are being certified.

### 1.3 QUALITY ASSURANCE

#### 1.3.1 Qualifications

- .. a. Contractor: Certification that the Contractor has prior experience on LBP abatement projects similar in nature and extent to ensure the capability to perform the abatement in a satisfactory manner.
- ..... b. Competent Person: Certification that the Contractor's full-time on-site Competent Person meets the competent person requirements of 29 CFR 1926 Section.62 and is experienced in administration and supervision of LBP abatement projects, including work practices, protective measures for building and personnel, disposal procedures, etc. This person shall have completed a Contractor Supervisor LBP abatement course by an EPA Training Center or an equivalent certification course, and have had a minimum of 2 years on-the-job experience.
- ..... c. Certified Industrial Hygienist (CIH): Certification that the CIH has 2 years prior experience on similar LBP abatement projects and is certified by the American Board of Industrial Hygiene (ABIH). The certification shall include a copy of the ABIH certificate showing certification number, and date of certification or recertification.
- ..... d. Industrial Hygienist: Certification that the Industrial Hygienist meets the Office of Personnel Management Standard for the Industrial Hygiene Series GS-690, and has a minimum of two years experience in LBP abatement.
- ..... e. Testing Laboratory: The name, address, and telephone number of the independent testing laboratory selected to perform sampling and analysis for personal and environmental air samples lead dust wipes, bulk sample analyses, and TCLP analysis. Documentation that the laboratory performing the analysis is an EPA National Lead Laboratory Accreditation Program (NLLAP) accredited laboratory and that it is rated proficient in the NIOSH/EPA Environmental Lead Proficiency Analytical Testing Program (ELPAT). Certification shall include accreditation for heavy metal analysis, list of experience relevant to analysis of lead in air, and a Quality Assurance and Quality Control Program. Currently, the American Association for Laboratory Accreditation (ASLA) and the American Industrial Hygiene Association (AIHA) are the EPA recognized laboratory accreditors. Documentation shall include the date of accreditation or reaccreditation.
- ..... f. Blood Lead Testing Laboratory. The name, address and telephone number of the blood lead testing laboratory; the laboratory's listing by OSHA and the U.S. Public Health Service Center for Disease Control (CDC); and documentation that the laboratory certified in the state where the work site is located.

#### 1.3.2 Respiratory Protection Devices

Manufacturer's certification of NIOSH or the Mine Safety and Health Administration (MSHA) approval for respiratory protection devices utilized on the site.

#### 1.3.3 Cartridges, Filters, and Vacuum Systems

Manufacturer's certification of NIOSH approval of respirator cartridges (organic vapor, acid gas, mist, dust, high efficiency particulate); High Efficiency Particulate Air (HEPA) filtration capabilities for all cartridges, filters, and HEPA vacuum systems.

#### 1.3.4 Medical Records

Certification that employees who are involved in LBP abatement work have received medical examinations and will receive continued medical surveillance, including biological monitoring, as required by 29 CFR 1926 Section.62 and by the state and local regulations pertaining to such work. Records shall be retained, at Contractor expense, in accordance with 29 CFR 1910 Section.20.

#### 1.3.5 Training

Training certification shall be provided prior to the start of work involving LBP abatement, for all of the Contractors' workers, supervisors and Competent Person. Training shall meet the requirements of 29 CFR 1926 Section.62, 29 CFR 1926 Section.59 and 49 CFR 172, and that required by EPA or the state LBP course for the work to be performed. Training shall be provided prior to the time of job assignment and, at least, annually. Training may cover all abatement methods or focus only on those methods specified in the LBP Management Plan. The project specific training shall, as a minimum, include the following:

- ..... a. Specific nature of the operation which could result in exposure to lead.
- ..... b. Purpose, proper selection, fitting, use, and limitations of respirators.
- ..... c. Purpose and description of the medical surveillance program and the medical removal protection program, including information concerning the adverse health effects associated with excessive exposure to lead (with particular attention to the adverse reproductive effects on both males and females and hazards to the fetus and additional precautions for employees who are pregnant).
- ..... d. Relevant engineering controls and good work practices.
- ..... e. The contents of any compliance plan in effect.
- ..... f. Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.
- ..... g. The employee's right of access to records under 29 CFR 1910 Section.20.

#### 1.3.6 Licenses and Permits

Copies of licenses and permits as required by applicable Federal, state, and local regulations shall be obtained at least 20 days before the start of the LBP abatement project.

#### 1.4 DESCRIPTION OF WORK

LBP is to be removed, encapsulated, or enclosed according to the LBP Management Plan developed.

#### 1.5 SITE VISIT

Contractor shall visit and investigate the site, review the drawings and specifications, assess the amount of LBP, and become familiar with conditions which will affect the work.

#### 1.6 LIABILITY INSURANCE FOR LBP

LBP abatement liability insurance shall be obtained without additional expense to the Government. The Contractor shall assume full responsibility and liability for the compliance with Federal, state, and local regulations pertaining to training, work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

#### 1.7 PROTECTION OF EXISTING WORK TO REMAIN

Abatement, storage, transportation, and disposal work 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.

#### 1.8 COORDINATION WITH OTHER WORK

Abatement and disposal work shall be coordinated with existing work and/or concurrent work being performed in adjacent areas.

#### 1.9 SAFETY AND HEALTH REGULATORY REQUIREMENTS

Work shall be performed in accordance with requirements of EM 385-1-1 and applicable regulations including, but not limited to 29 CFR 1910, 29 CFR 1926, especially Section.62. Matters of interpretation of the standards shall be submitted to the appropriate agency for resolution before starting work. Where these requirements vary, the most stringent shall apply.

#### 1.10 PRECONSTRUCTION SAFETY MEETING

.....  
The Contractor shall attend a preconstruction safety meeting prior to starting any work involving LBP abatement. Items required to be submitted will be reviewed for completeness, and where specified, for acceptance.

#### 1.11 ACCIDENT PREVENTION PLAN

##### 1.11.1 Preparation and Implementation

The Accident Preparation Plan (APP) shall be prepared in accordance with EM 385-1-1, Table 1-1. Where topic in table 1-1 is not applicable, the APP shall justify its omission or reduced level of detail, and establish that adequate consideration was given to the topic. The APP shall cover on-site work by the Contractor or subcontractors. The Competent Person shall be responsible for development, implementation, and quality control of the content and actions required in the APP. For each anticipated work task, the APP shall establish hazards and control measures. The APP shall be easily readable and understandable by the Contractor's work force.

### 1.11.2 Acceptance and Modifications

The APP shall be prepared, signed and dated by the Contractors Competent Person and submitted 10 days prior to the preconstruction safety conference. Deficiencies in the APP shall be discussed at the Preconstruction Safety Conference and the APP shall be revised to correct the deficiencies, and resubmitted for acceptance. On-site work shall not begin until the APP has been accepted unless otherwise authorized by the Contracting Officer. One copy of the APP shall be maintained in the Contractor's jobsite file, and a second copy shall be posted where it will be accessible to personnel on the site. As work proceeds, the APP shall be adapted to new situations and conditions. Changes to the APP shall be made with concurrence of the Competent Person and Site Superintendent, and acceptance of the Contracting Officer. Should an unforeseen hazard become evident during performance of the work, the Competent Person shall bring such hazard to the attention of the Superintendent and the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, the Contractor shall take necessary action to re-establish and maintain safe working conditions; and to safeguard on-site personnel, visitors, the public, and the environment. Disregard for provisions of this specification, or the accepted APP shall be cause for stopping of work until the matter is rectified.

### 1.11.3 Activity Hazard Analyses

An Activity Hazard Analysis (AHA) shall be prepared prior to beginning each major phase of the work and submitted for review and acceptance. Format shall be in accordance with EM 385-1-1, figure 1-1. A major phase of work is defined as an operation involving hazards not experienced in previous operations, or where a new work crew is to perform. The analysis shall define the activities and the sequence in which they are to be performed, specific hazards anticipated, and control measures to be implemented to eliminate or reduce each hazard to an acceptable level. Work shall not proceed on that phase until the Activity Hazard Analysis has been accepted and a preparatory meeting has been conducted by the Contractor to discuss content of the AHA with everyone engaged in the activity, including the Government's on-site representative. The AHA shall be continuously reviewed and modified when appropriate to address changing conditions or operations. The accepted AHA shall be appended to and become part of the APP.

## 1.12 RESPIRATORY PROTECTION PROGRAM

A respiratory protection program shall be established as required by 29 CFR 1926 Section.103 and.62 and in accordance with 29 CFR 1910 Section.134. An approved respirator shall be furnished to each employee and visitor required to enter a LBP work control area. A fit test shall be conducted in accordance with 29 CFR 1926 Section.62, Appendix D.

## 1.13 HAZARD COMMUNICATION PROGRAM

A Hazard Communication Program shall be implemented in accordance with 29 CFR 1926 Section.59.

## 1.14 SAFETY AND HEALTH OVERSIGHT

The Competent Person shall be the on-site person responsible for coordination, safety, security and execution of the work. The Competent Person shall be able to identify existing and predictable lead hazards and shall have the authority to take corrective measures to eliminate them. The CIH shall be responsible for dust wipe and personal and environmental sampling.

## 1.15 PREPARATORY INSPECTION MEETING

The Contractor shall arrange and hold a preparatory inspection meeting immediately prior to beginning any LBP abatement. The APP, Activity Hazard Analyses, and the Contractor's LBP Management Plan, including containment, engineering controls, worker protection, training, and monitoring, will be reviewed for completeness.

## 1.16 TRAINED AND COMPETENT PERSONNEL

Work shall be performed by Competent Persons, qualified and trained in the abatement, enclosure, encapsulation, monitoring, testing, storage, treatment, hauling, and disposal of contaminated LBP debris material, and in subsequent cleanup of the affected environment. Workers shall comply with the appropriate Federal, state, and local regulations which mandate training requirements and work practices and shall be capable of performing the work under this contract.

## 1.17 POSTED WARNINGS AND NOTICES

The following regulations, warnings, and notices shall be posted at the work site in accordance with 29 CFR 1926 Section.62.

### 1.17.1 Regulations

Two copies of applicable Federal, state, and local regulations and NIOSH OSHA Booklet 3142 shall be maintained. One copy shall be posted at the work site and one copy shall be on file in the project office.

### 1.17.2 Warning Signs and Labels

Warning signs shall be provided at building entrances and approaches to LBP control areas containing airborne LBP debris. Signs shall be located at a distance from the LBP control areas that will allow personnel to read the sign and take the necessary protective actions required before entering the LBP control area.

#### 1.17.2.1 Warning Signs

Warning signs shall be in English and be of sufficient size to be clearly legible and display the following:

WARNING  
LEAD WORK AREA  
POISON  
NO SMOKING OR EATING  
AUTHORIZED PERSONNEL ONLY  
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

#### 1.17.2.2 Warning Labels

Warning labels shall be in English and be of sufficient size to be clearly legible and display the following:

CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS.

#### 1.17.3 Worker Information

Right-to-know notices shall be placed in clearly visible areas of the work site in compliance with Federal, state, and local regulations.

#### 1.17.4 Air Monitoring Results

Daily air monitoring results shall be prepared so as to be easily understood by the workers, and shall be placed in a clearly visible area of the work site.

#### 1.17.5 Emergency Telephone Numbers

A list of telephone numbers shall be posted at the site. The list shall include numbers of the local hospital, emergency squad, police and fire departments, Government and Contractor representatives who can be reached 24 hours per day, and professional consultants directly involved in the project.

### 1.18 EQUIPMENT AND MATERIALS

Sufficient quantities of health and safety materials required by 29 CFR 1926 Section.62, and other materials and equipment needed to complete the project, shall be available and kept on the site.

#### 1.18.1 Respirators

Air-purifying respirators shall be approved by NIOSH for use with dust, fumes, and mists having permissible exposure limits less than 0.05 milligrams per cubic meter (i.e., have high-efficiency particulate air (HEPA) filters) and for other hazardous airborne contaminants that may be encountered, as determined by the Competent Person. Respirators shall comply with the requirements of 29 CFR 1926 Section.62 and shall be used in accordance with 29 CFR 1926 Section.103 and 29 CFR 1910 Section.134.

#### 1.18.2 Respirator Cartridges

A sufficient supply of respirator cartridges shall be maintained at the work site to provide new cartridges to employees, authorized visitors, and Government personnel throughout the duration of the project. Cartridges shall be replaced according to the manufacturer's recommendations, when breathing becomes difficult, or if the cartridge becomes wet.

#### 1.18.3 Protective Clothing

The Contractor shall furnish, at no cost to personnel, equipment/clothing for protection from airborne and waterborne LBP debris.

An adequate supply of these items shall be available for worker, authorized visitor, and Government personnel use. Workers and visitors shall not take protective clothing and equipment off the work site at any time. Protective clothing includes:

- ..... a. Coveralls (Whole Body Protective Coverings): Full-body coveralls and head covers shall be worn by workers in the work area. Sleeves shall be secured at the wrist and pants legs at the ankle with tape. Permeable clothing shall be provided in heat-stress conditions. Where non-disposable coveralls are provided, these coveralls shall be cleaned after each wearing. Cleaning of coveralls and other non-disposable clothing shall be in accordance with the provisions for cleaning in 29 CFR 1926 Section.62.

- ..... b. Boots: Work boots with nonskid soles or impermeable work boot covers shall be worn by workers. Where required by OSHA, safety boots (steel toe or steel toe and shank) shall be worn. Paint the uppers of boots red with waterproof enamel. Do not allow boots to be removed from the work area for any reason after being contaminated with LBP debris. Dispose of boots as LBP contaminated waste at the end of the work.
- ..... c. Gloves: Inner gloves, appropriate for items and hazards encountered, and disposable outer work gloves shall be provided to each worker and shall be worn while the worker is in the work area. Glove material shall be appropriate for the specific chemical exposure. Gloves shall not be removed from the work area, and shall be disposed of as LBP contaminated waste at the end of the work.
- .. d. Hard Hats: Head protection (hard hats) shall be provided as required by OSHA and EM 385-1-1 for workers and authorized visitors. Protective plastic strap suspension hats shall be used. Hard hats shall be worn at all times that work is in progress. Hats shall remain in the work area until the project is completed. Hats shall be thoroughly cleaned, decontaminated, and bagged before being removed from the work area at the end of the project.
- ..... e. Eye Protection: Fog-proof goggles for personnel engaged in LBP abatement operations shall be worn when the use of a full face piece respirator is not required.
- .....f. Work Clothing: Cloth work clothes shall be provided for wearing under the disposable protective coveralls and foot coverings.

#### 1.18.4 Negative Air Pressure System

When a LBP control area requires the use of an airtight containment barrier, a negative air pressure system shall be used, and pressure differential recordings taken. LBP shall not be removed from the LBP control area until the proper engineer controls and HEPA filtration systems are in place.

##### 1.18.4.1 HEPA Filter Requirements

The negative air pressure system shall be equipped with 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 0.02 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 removing 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 2.5 inches of water static pressure differential on a magnehelic gage.
- ..... d. The unit shall be equipped with a manometer-type negative pressure differential monitor with minor scale division of 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. Record manually manometer readings of the pressure differential between the LBP control area and adjacent unsealed areas at the beginning of each workday and every 2 working hours thereafter.
- ..... 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.
- .....i. The unit shall be ducted through the containment barrier wall to the outside of the building or work area. The unit shall not be exhausted into any work area.

##### 1.18.4.2 Number of Units Required

The air within the containment barrier shall be changed at least once every 15 minutes by a continuously operating negative air pressure system, until the LBP control area barrier is removed. Filters shall be replaced as necessary to maintain the efficiency of the system. A back-up unit shall be maintained on-site.

##### 1.18.4.3 Auxiliary Generator

An auxiliary generator shall be provided with a capacity adequate 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.

#### 1.18.4.4 Local HVAC Systems

The building heating, ventilating, and air conditioning (HVAC) system shall not be used as the negative air pressure system for the LBP control area.

#### 1.18.4.5 Discontinuing Negative Air Pressure System

The negative air pressure system shall not be shut down during LBP abatement work unless authorized by the Contracting Officer. At the completion of the LBP abatement and disposal project, units shall be run until full cleanup has been completed and wipe clearance samples have been collected, analyzed, and have passed final clearance testing requirements. Dismantling of the negative air pressure systems shall conform to the written decontamination procedures. Prefilters shall be removed and properly disposed of, and the intake to the machines shall be sealed with polyethylene to prevent environmental contamination.

#### 1.18.5 Expendable Supplies

##### 1.18.5.1 Polyethylene Sheet and Bags - General

Polyethylene sheet and bags shall be minimum 6 mils thick. Bags shall have pre-printed labels, and 5 inch (minimum) long plastic ties, pointed and looped to secure the filled bags. Polyethylene sheets shall be in roll sizes to minimize seams.

##### 1.18.5.2 Polyethylene Sheet - Flame Resistant

Where a potential for fire exists, flame-resistant polyethylene sheets shall be provided. Polyethylene film shall be frosted or black and shall conform to the requirements of NFPA 701.

##### 1.18.5.3 Polyethylene Sheet - Reinforced

Reinforced polyethylene sheet shall be provided where high skin strength is required such as where it constitutes the only barrier between the LBP control area and the outdoor environment. The sheet stock shall consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between two layers of polyethylene film. Film shall meet flame resistant standards of NFPA 701.

##### 1.18.5.4 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 2 inches wide, industrial strength.

##### 1.18.5.5 Containers

Impermeable containers shall be used to receive and retain lead contaminated material until disposal. Containers shall be labeled in accordance with EPA, DOT and OSHA standards.

##### 1.18.5.6 Chemicals

Chemicals, including caustics and paint strippers, shall be properly labeled and stored in leak-tight containers.

#### 1.18.6 Vacuum Systems

HEPA filtered vacuum systems shall be used during abatement operations which generate dust. The systems shall be suitably sized for the project, and filters shall be capable of removing particles as small as 0.3 micrometers at a minimum efficiency of 99.97 percent.

#### 1.18.7 Heat Blower Guns

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

#### 1.18.8 Chemical Paint Strippers

Chemical paint strippers shall contain no methylene chloride and shall be formulated to prevent stain, discoloration, or raising of the substrate materials.

### 1.18.9 Chemical Paint Stripper Neutralizer

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

### 1.19 STORAGE OF MATERIALS

Materials shall be stored in a place and manner which protects them from damage and contamination. During periods of cold weather, plastic materials shall be protected from the cold. No flammable or hazardous materials shall be stored inside any building. Regularly inspect materials to identify damaged or deteriorating items. Damaged or deteriorated items shall not be used and shall be removed from the site as soon as they are discovered. Any materials which become contaminated with LBP waste shall be disposed of consistent with the requirements of 40 CFR 148 and these specifications. Stored materials shall not present a hazard or an inconvenience to workers, visitors, and/or other occupants and employees of the building.

## PART 2 PRODUCTS

(NOT APPLICABLE)

## PART 3 EXECUTION

### 3.1 PILOT ABATEMENT PROJECT

Prior to beginning full-scale abatement, a pilot abatement project may be required for the first Order using a given subcontractor. It shall demonstrate the specified abatement procedure for the work required. Preabatement lead dust samples shall be collected from each type of surface in the pilot facility as specified in paragraphs Wipe Sampling, and Preabatement Lead-Dust Wipe Samples. The Contracting Officer shall evaluate the following during the pilot abatement project:

- ..... a. Lead dust wipe samples shall be collected and analyzed during abatement and for final clearance as specified in paragraph Wipe Sampling. If results of analysis indicate that lead levels are above clearance levels, the Contractor shall evaluate his/her abatement cleanup procedures. If clearance levels are low and continue to be low, less restrictive engineering controls may be proposed by the Contractor.
- ..... b. If personal air sample analyses indicate that action levels or permissible exposure limits specified in 29 CFR 1926 Section.62 have not been exceeded, then respirator protection may become less restrictive. Half-face respirators shall be the minimum respiratory protection employed.
- ..... c. During cleanup a final dust wipe clearance shall be performed after a single cleanup iteration. If the samples are below acceptable levels the Contractor may request approval for one cleanup pass instead of two cleanup passes.
- ..... d. Adequate samples of waste generated (water, solid components, caustic paste, filters, paint chips, etc.) shall be collected for Toxicity Characteristic Leaching Procedure (TCLP) testing. The TCLP test shall be performed by an accredited laboratory.
- ..... e. Waste generated throughout the abatement project shall be properly containerized, according to applicable regulations, and disposed of as per the results of the TCLP analysis.

### 3.2 WORK PROCEDURES

LBP abatement and related work shall be performed in accordance with the accepted Contractor's LBP Management Plan as modified and approved, following the pilot abatement project. Procedures and equipment required to limit occupational and environmental exposures to lead during LBP removal shall be in accordance with 29 CFR 1926 Section.62, and as specified herein. Paint chips and associated waste shall be disposed of in compliance with Federal, state, and local regulations.

#### 3.2.1 Personnel Protection Procedures

Personnel shall wear and use protective clothing and equipment as specified. Eating, smoking, drinking, chewing tobacco and chewing gum, and applying makeup shall not be permitted in the LBP control area. Personnel of trades not engaged in the abatement and disposal of LBP shall not be exposed at any time to airborne concentrations of lead equal to or in excess of 30 micrograms per cubic meter of air. Electrical service shall be disconnected when wet removal is performed, and temporary electrical service protected by a ground fault circuit interrupter shall be provided.

#### 3.2.2 Safety and Health Procedures

The Competent Person shall be present on the work site throughout the abatement project to supervise, monitor, and document the project's health and safety provisions. A daily log shall be maintained showing the results of sampling tests throughout the project area. LBP abatement work being conducted within a LBP Control area where an airtight barrier is required shall be stopped if dust wipe concentration levels collected outside the containment area during abatement, equal or exceed the preabatement level or 200 micrograms per square foot, whichever is greater.

### 3.2.3 Safety and Health Responsibilities

The Competent Person shall:

- ..... a. Verify that training meets applicable requirements.
- ..... b. Review and approve LBP Management Plan for conformance to the applicable referenced standards.
- ..... c. Inspect LBP removal work for conformance with the accepted LBP Management Plan.
- ..... d. Ensure that worker exposure air monitoring activities are in accordance with 29 CFR 1926 Section.62.
- ..... e. Ensure work is performed in strict accordance with specifications.
- ...f. Ensure hazardous exposure to personnel and to the environment are adequately controlled.

The CIH shall be responsible for directing personal and environmental air monitoring and lead dust wipe sampling.

### 3.2.4 Medical Surveillance Procedures

Medical surveillance shall be implemented in accordance with the approved Contractor's LBP Management Plan, and shall comply with the requirements of 29 CFR 1926 Section.62, including the provisions for biological monitoring, medical removal protection and a physician's written opinion, signed by the physician performing the employee examination. The Contractor shall provide a copy of the written opinion for Contractor's employees 2 days prior to each employee's commencement of work.

### 3.2.5 Engineering Controls and Containment Structures

#### 3.2.5.1 LBP Control Area

The LBP control area is where LBP abatement work occurs and as such shall be considered contaminated, and shall be isolated to prevent LBP containing dust or debris from passing into adjacent building or open areas. The control area shall be decontaminated at the completion of the LBP abatement and disposal work.

#### 3.2.5.2 Boundary Requirements

Physical boundaries shall be provided around exterior LBP control areas by roping off the area indicated in the LBP Management Plan. Interior projects shall be isolated by curtains, portable partitions, or other enclosures to ensure that concentrations of lead dust outside the LBP control area will not equal or exceed the preabatement level or 200 micrograms per square foot, whichever is greater.

#### 3.2.5.3 Control Barriers

The LBP control area shall be separated from other portions of the building and the outside with control barriers. The polyethylene sheeting will have all openings masked and sealed, and shall be erected according to the Contractor's LBP Management Plan. Polyethylene sheeting shall be mechanically supported, independent of duct tape or spray adhesive.

#### 3.2.5.4 Preabatement Lead-Dust Wipe Samples

Preabatement lead-dust wipe samples shall be taken outside the LBP controlled area, in accordance with HUD 0005646. Samples shall be taken within 10 feet of the abatement structure at 20 percent of the area planned for abatement.

#### 3.2.5.5 Masking and Sealing

- ..... a. Interior LBP control area requirements: Openings shall be sealed where the release of airborne LBP dust is expected. A control area shall be established with the use of curtains, portable partitions, or other systems in order to prevent the escape of dust from the contaminated control area. The control area shall be provided with protective covering of two layers of polyethylene sheeting over floors. Penetrations of the floor, walls, and ceiling shall be sealed with polyethylene sheeting and duct tape. Polyethylene sheeting shall be firmly attached to the structure. Joints shall be sealed with spray adhesive and duct tape. Openings shall be provided for the supply and exhaust of air for the negative air pressure system. Personal monitoring during the work shift shall be in accordance with 29 CFR 1926 Section.62.
- ..... b. Exterior LBP control area requirements: Where the construction of a contained LBP control area is impractical, a roped-off perimeter shall be installed 20 feet from, and around, the area where the LBP handling procedures are performed and other requirements for LBP control areas shall be maintained. Personal monitoring of airborne concentrations shall be conducted in adjacent areas, during the work shift, in accordance with 29 CFR 1926 Section 62. Where wipe sampling is not practical, air monitoring outside of the roped-off perimeter shall be conducted as specified. Airborne concentrations shall not exceed specified levels.

### 3.2.5.6 Personnel Decontamination Unit Procedures

Decontamination units shall be constructed when required for the abatement procedures. Materials fabricated or delivered to the site before the shop drawings have been returned to the Contractor will be subject to rejection by the Contracting Officer. Specifications and drawings of portable prefab units, such as a trailer unit, if utilized, must be submitted for review and approval before start of construction. Submittal shall include, but not be limited to, a floor plan layout showing dimensions, materials, sizes, thicknesses, plumbing, and electrical outlets. Access between contaminated and uncontaminated rooms or areas shall be through an airlock. Access between any two rooms or room and trailer within the decontamination unit shall be through a plastic sheeting curtained doorway. A separate equipment decontamination unit shall be provided. Each work area shall have an emergency exit. The personnel decontamination unit's clean room shall be the only means of entrance and exit, except for emergencies, from the LBP control area. Materials shall exit the LBP control area through the equipment decontamination area.

### 3.2.5.7 Clean Room Procedures

The clean room shall have only one exit to non-contaminated areas of the building or site. An airtight seal shall be constructed of polyethylene between the clean room and the rest of the building. Surfaces of the clean room shall be protected with sheet polyethylene. A temporary unit with a separate equipment decontamination locker room and a clean locker room shall be provided for personnel who are required to wear whole body protective clothing. One locker shall be provided in each locker room for each LBP abatement worker, and each Contractor's representative. Lead-free personal clothing and shoes shall be kept in the clean locker. Hand wash station/showers shall be located between the equipment decontamination locker room and the clean locker room, and employees shall wash or shower before changing into personal clothes. An adequate supply of clean disposable towels shall be provided. LBP contaminated work clothing shall be cleaned. Clean rooms shall be physically attached to the LBP control area for areas inside the building but may be directly adjacent to the LBP control area outside of the building. Joint use of this space for other functions, such as offices, equipment storage, etc., is prohibited.

### 3.2.5.8 Hand Wash Station/Shower Room Procedures

An operational shower and hand washing station shall be provided between the work area and the clean changing room. Workers shall wash and/or shower before entering the clean changing room. Shower room shall be separated from other rooms by air tight walls fabricated from polyethylene sheeting. Water shall be hot and cold or warm. Shower heads and controls, soap dish, continuing supply of soap, and clean towels shall be provided. The shower shall be maintained in a sanitary condition. Waste water shall be pumped to drain and through waste water filters that meet state and/or local requirements. These filters shall be located inside the shower unit and filters shall be changed regularly. Spent filters shall be discarded as LBP contaminated waste.

### 3.2.5.9 Equipment Decontamination Unit Procedures

The Equipment Decontamination Unit shall be used for removal of equipment and materials from the LBP control area, and shall include a wash room, holding room, and an enclosed walkway. The unit shall be constructed from wood framing material and polyethylene sheeting. Workers shall not enter or exit the LBP control area through the Equipment Decontamination Unit. A washdown station, consisting of an enclosed shower unit, shall be located in the work area outside the Wash Room. The washdown station shall be used to clean equipment, bags and containers. Bagged or containerized LBP wastes shall be passed from the work area and cleaned in the Wash Room. The Wash Room shall be separated from the work area by a polyethylene sheeting flap. Wastewater shall be filtered and filters shall be changed as required for the shower unit and the Wash Room. Filters shall be disposed of as LBP contaminated wastes. The Holding Room shall be used as a drop location for bagged LBP passed from the Wash Room. This room shall be constructed so that bagged materials cannot be passed from the Wash Room through the Holding Room to the enclosed walkway. The walkway shall be separated from adjacent rooms by double flaps of 1/16 inch thick single ply rubber roofing materials of EPDM or Neoprene. The enclosed walkway shall isolate the Holding Room from the building exterior and shall be constructed of wood framing and polyethylene sheeting. The walkway shall provide access to the Holding Room from the building exterior. The enclosed walkway shall be separated from the exterior by a single flap of polyethylene sheeting.

### 3.2.5.10 Maintenance of Decontamination Units

Barriers and polyethylene sheeting shall be effectively sealed and taped. Containment barriers shall be visually inspected at the beginning of each work period. Damaged barriers and defects shall be immediately repaired upon discovery. Smoke methods shall be used to test effectiveness of barriers when directed by the Contracting Officer.

### 3.2.5.11 LBP Control Area Exiting Procedures

Personnel exiting a LBP control area shall perform the following procedures and shall not leave the work place wearing any clothing or equipment worn during the work day:

..... a. Vacuum all protective clothing before removing.

..... b. Remove protective clothing in the decontamination room, and place this clothing in an approved impermeable disposal bag.

..... c. Wash or shower.

..... d. Change to clean clothes prior to leaving the physical boundary designated around the lead-contaminated work site.

### 3.2.6 Furnishings

The Government or Contractor shall remove furniture and equipment from the work area before LBP removal work begins, as stated on Order.

### 3.2.7 Building Ventilating Systems

Any building ventilating system or any other system bringing air into or out of the LBP control work area shall be shut down and isolated by lockable switch; disconnecting wires; removing circuit breakers; isolated by airtight seals, or other positive means that will prevent spread of contamination through the system and accidental premature restarting of the equipment. Airtight seals shall consist of rigid covers for supply and exhaust grills and 1 layer of polyethylene. Individual seals shall be applied to ventilation openings (supply and exhaust), lighting fixtures, clocks, windows, doorways, elevator doors, stairs, ramps, speakers, and other openings into the work area. Seals shall be maintained until project decontamination is completed. After decontamination work has been completed and final air sample testing proves that the area is decontaminated, seals shall be removed and the ventilating systems may be operated again.

### 3.2.8 Temporary Utilities

Temporary equipment to provide adequate power, light, heat, and water shall be installed to accomplish the abatement operations properly and safely. The Contractor shall maintain the security and maintenance of the utility system in the LBP control areas. In the event of a failure of any utility system, the Government will not be responsible for any loss of time or other expense incurred by the Contractor. Wiring and electrical service shall be as specified in to Section 16415 ELECTRICAL WORK, INTERIOR or Section 16370 ELECTRICAL DISTRIBUTION SYSTEM, AERIAL. In addition, the Contractor shall provide:

.. a. Backflow protection on all water connections. Fittings installed by the Contractor shall be removed after completion of work with no damage or alteration to existing water piping and equipment.

.. b. Heavy-duty abrasion-resistant hoses to provide water to each work area and decontamination area.

..... c. A hot water heater, if hot water is not supplied through the building's existing water supply to the decontamination showers.

..... d. Electrical service to work areas. Electrical service shall comply with NEMA, NECA, and UL standards. Warning signs shall be posted at power outlets which are other than 110-120 volt power. Only grounded extension cords shall be used. Incandescent lamps and light fixtures shall be of adequate wattage to provide good illumination in LBP control areas.

..... e. Temporary heating units, when needed, that have been tested and labeled by UL, FM, or another recognized trade association related to the fuel being consumed. Forced air or fan type units shall not be utilized inside a work area. Units shall have tip-over protection.

..... f. Sufficient quantity of single-occupant, self-contained chemical toilets, properly vented and fully enclosed, if permanent toilets are not available.

## 3.3 LBP ABATEMENT METHODS (Select the method most appropriate per the Order)

### 3.3.1 Encapsulation with Surface Coatings

Peeling and deteriorated surfaces shall be wet scraped prior to application of the approved encapsulant. Debris shall be handled in accordance with the Hazardous Waste Management Plan. Surfaces shall be prepared according to the manufacturer's specifications. Surface coatings shall not be applied to friction surfaces such as window tracks or door jams.

### 3.3.2 Encapsulation with Flexible Wall Covering Systems

Peeling and deteriorated surfaces shall be wet scraped prior to application of the approved flexible wall covering material. Debris shall be handled in accordance with the Hazardous Waste Management Plan. Surfaces shall be prepared according to the manufacturer's specifications.

### 3.3.3 Enclosure with Gypsum Board

Peeling and deteriorated surfaces shall be wet scraped prior to application of the enclosure. Gypsum board shall be used to create an enclosure over, in front of, or around the existing surface. The gypsum board shall be attached using drywall screws and construction adhesive. Electrical outlets, switches, telephone jacks and ventilating or heating registers shall be repositioned to be flush with the new gypsum board surface. Seams shall be taped and plastered according to specifications. The complete enclosure shall be painted and trimmed.

### 3.3.4 Exterior Enclosure

Peeling and deteriorating surfaces shall be wet scraped prior to application of the approved siding or other finish. All debris shall be handled in accordance with the Hazardous Waste Management Plan. Siding and moisture barriers shall be installed according to manufacturer's specifications and local building codes.

- ..... a. Doors and windows on the side of the building upon which a dust-generating method is being used, and on the same floor and all floors below, must be closed and covered with polyethylene sheeting.
- ..... b. The ground and any plants or shrubs in the area in which exterior abatement is occurring shall be covered with a waterproof canvas tarp and weighted at all edges to prevent blowing. Such covering shall cover from the side of the structure to a point eight feet away from the structure. The covering shall be taped or otherwise attached to the structure. The tarp shall be placed in a manner that traps all debris and water. This is best accomplished by elevating the edges. The tarp shall be properly disposed of and not re-used.

### 3.3.5 Component Replacement

As required in Order.

### 3.3.6 Chemical Stripping

LBP shall be removed by using approved chemical strippers. Chemical strippers containing methylene chloride are prohibited. Chemical stripping may take place on-site or off-site. Stripping shall be done according to manufacturer's recommendations. Substrates shall be thoroughly washed and neutralized before applying a primer or sealing coat. Waste generated by the stripping process shall be handled in accordance with the Hazardous Waste Management Plan. Adjacent walls and floors shall be protected to prevent contamination.

### 3.3.7 Hand-Scraping with a Heat Gun

LBP shall be removed by hand-scraping with a heat gun. Paint residue shall be handled in accordance with the Hazardous Waste Management Plan. Heat guns shall be operated below 1,100 degrees F to prevent possible release of toxic fumes or starting a fire.

### 3.3.8 Vacuum Blasting

LBP shall be removed by vacuum blasting techniques with the device fitted to HEPA vacuum systems. Work shall be performed in a LBP control area using negative pressure full containment with HEPA filtered exhaust. Paint residue shall be handled in accordance with the Hazardous Waste Management Plan.

### 3.3.9 Needle Gun

LBP shall be removed by needle gun with the device fitted to HEPA vacuum systems. Work shall be performed in a LBP control area using negative pressure full containment with HEPA filtered exhaust. Paint residue shall be handled in accordance with the Hazardous Waste Management Plan.

## 3.4 MONITORING

During the entire LBP removal and disposal operations, a CIH shall be onsite directing the monitoring/sampling and inspecting the work to ensure that the health and safety requirements of this contract are satisfied.

### 3.4.1 Personal Air Monitoring

Airborne concentrations of lead shall be collected and analyzed in accordance with 29 CFR 1926 Section.62. Results shall be reported in micrograms per cubic meter of air. The Competent Person shall use personal air monitoring results to determine the effectiveness of engineering controls, the adequacy of PPE and to determine if proper work practices are being employed. The Contracting Officer shall be notified if any personal air monitoring result equals or exceeds 30 micrograms per cubic meter of air. The Contractor shall take steps to reduce the concentration of lead in the air.

### 3.4.2 Wipe Sampling

Wipe sampling for lead dust concentrations shall be conducted:

- ..... a. Preabatement to establish a baseline.
- ..... b. During abatement to monitor activities and ensure containment integrity.
- ..... c. Post abatement to determine if specified clearance criteria has been met.

#### 3.4.2.1 Preabatement

Preabatement wipe samples shall be collected outside the LBP control area in accordance with paragraph Preabatement Lead-Dust Wipe Samples. Samples outside the LBP control work area shall be collected at critical barriers, in the clean room of the decontamination unit and in traffic control areas such as personal and equipment entrances.

#### 3.4.2.2 Abatement

The CIH shall collect wipe samples during all LBP abatement activities on a daily basis. The samples shall be collected outside the LBP control area in accordance with paragraph Preabatement Lead-Dust Wipe Samples. Samples shall be collected outside the LBP control work area at critical barriers, in the clean room of the decontamination unit and in traffic control areas such as personal and equipment entrances.

#### 3.4.2.3 Results

The Contractor shall have the results of the wipe sampling within 48 hours after the completion of the sampling. Results shall be reported in micrograms per square foot.

#### 3.4.2.4 Excessive Levels

LBP abatement work being conducted within a LBP control area shall be stopped if measured dust wipe concentration levels collected outside the containment area, during abatement, equal or exceed the preabatement levels or 200 micrograms per square foot, whichever is greater. The Contractor shall immediately notify the Contracting Officer. At the direction of the Contracting Officer, the Contractor shall clean outside areas which equal or exceed the levels stated above, at no additional cost to the Government. The cleaning shall be in accordance with paragraph CLEANUP AND DISPOSAL, prior to clearance. The Contractor shall collect and have analyzed additional wipe samples at no charge to the Government to ensure the areas are clean. Cleaning and resampling shall continue until levels as stated above are achieved. The Contractor shall correct containment and/or work practices to mitigate the problem. Removal work shall resume when approval is given by the Contracting Officer.

#### 3.4.2.5 Post Abatement

Post abatement samples shall be collected in accordance with paragraph Final Clearance Testing.

#### 3.4.3 Area Air Monitoring (For Exterior Abatement)

Airborne concentrations of lead shall be collected and analyzed in accordance with 29 CFR 1926 Section.62. Results shall be reported in micrograms per cubic meter of air.

##### 3.4.3.1 Preabatement

Preabatement samples shall be collected in the following locations outside the work area; one upwind of the abatement and two downwind of the abatement activities.

##### 3.4.3.2 Abatement

The CIH shall collect area air samples on a daily basis. The samples shall be collected in the same location as the preabatement samples.

##### 3.4.3.3 Results

The Contractor shall have the results of the area air monitoring within 48 hours after completion of the sampling. Results shall be reported in micrograms per cubic meter of air.

##### 3.4.3.4 Excessive Levels

Outdoor LBP abatement shall cease and the Contracting Officer notified if measured airborne lead concentrations, collected during abatement, exceed the preabatement airborne concentration levels. The Contractor may be required to clean and resample the effected area, at no additional cost to the Government, if directed by the Contracting Officer. The Contractor shall correct the work practices and/or engineering controls and shall resume abatement at the direction of the Contracting Officer.

#### 3.4.4 Waste Sampling and Testing

Sampling and testing of all waste shall be in accordance with 40 CFR 261.

#### 3.4.5 Soil Sampling

##### 3.4.5.1 Preabatement

In order to establish baseline lead-in-soil conditions on the site prior to the initiation of exterior lead abatement, composite soil samples shall be collected. Eight to ten small portions of surface soil shall be scooped with a fresh 50 mL plastic centrifuge tube and composited in the tube. This will represent a single sample. If excessive paint chips are present in the soil they shall be included in the sample. The 8 - 10 samples shall be collected such that they represent the area where abatement occurred. One shall be taken at the dripline extending out a distance of 10 feet. Sampling shall be on bare soil. The laboratory shall utilize procedures in EPA SOP Publication No. 600/2-91-231 or other procedures required by the state where work is being performed.

#### 3.4.5.2 Post Abatement

Post abatement soil samples shall be collected in the same locations as the preabatement samples utilizing the same procedures. If post abatement soil samples exceed the preabatement levels, the Contractor may be required to perform soil excavation to a depth of two inches in the area specified by the Contracting Officer at no additional cost to the Government. The soil shall be tested as specified in paragraph CLEANUP AND DISPOSAL. Analysis that exceed TCLP limits shall be treated as LBP contaminated waste and disposed accordingly.

### 3.5 ADJACENT AREAS

Damage to adjacent areas shall be repaired to the approval of the Contracting Officer.

### 3.6 CLEANUP AND DISPOSAL

#### 3.6.1 Cleanup

##### 3.6.1.1 Daily

Surfaces in the LBP control area shall be maintained free of accumulations of paint chips and dust. Spread of dust and debris shall be restricted; waste shall not be distributed over the work area. Dry sweep or compressed air shall not be used for cleanup. At the end of each shift, the area shall be cleaned of visible lead paint contamination by vacuuming with a HEPA filtered vacuum cleaner and wet mopping the area. LBP abatement work shall cease during the cleanup.

##### 3.6.1.2 Prior to Clearance

Upon completion of the lead paint abatement and a satisfactory visual inspection by the Contracting Officer in a given work area, a preliminary clean-up shall be performed by the Contractor. This clean-up includes removal of any contaminated material, equipment or debris including polyethylene sheeting from the work area, except for critical barriers. The polyethylene sheeting shall be sprayed or misted with water for dust control, abatement debris removed and then the sheeting removed by folding it in upon itself. Polyethylene sheeting used for critical barriers shall remain in place until final clearance criteria. The following methodology shall be utilized during the cleanup prior to clearance.

- ..... a. Lead-contaminated debris shall be containerized in accordance with paragraph Contaminated Waste. Waste bags shall not be overloaded, shall be securely sealed and stored in the designated area until disposal.
- ..... b. Non-contaminated debris shall be containerized; removed from the work area and stored in the designated area until disposal in accordance with paragraph Non-Contaminated Waste.
- ..... c. Removal of surface polyethylene sheeting shall begin from upper levels such as cabinets and shelves. Removal of floor polyethylene sheeting shall begin at the corners and folded in the middle to contain the dust. Polyethylene shall be disposed of as specified for debris.
- ..... d. Cleaning. Once the polyethylene sheeting, except critical barriers is removed from the work area, cleaning shall begin. It shall be done in the following sequence: HEPA Vacuum; Tri-Sodium Phosphate (TSP) wash (or equivalent cleaner); and HEPA Vacuum.
- ..... e. HEPA Vacuum. Vacuum all surfaces. Begin with ceilings and proceed down the walls, including window, doors, door trim and ending with floors. Begin vacuuming at the furthest corner from the entrance to the work area.
- ..... f. Wet Wash. Wash or mop the surfaces vacuumed in the same sequence. Contractor shall utilize a tri-sodium phosphate (TSP) detergent solution or other equally effective cleaning agent and allow surface to dry.
- ..... g. Cleaning Equipment. The Contractor shall prepare and use detergents containing five to ten percent TSP or other equally effective cleaning agent which shall be used in accordance with the manufacturers instructions. The waste water from cleaning shall be contained and disposed of according to applicable Federal, state, county and local regulations and guidelines. The waste water shall not be disposed of in storm sewers or sanitary sewers without specific and written Government approval.

#### 3.6.2 Visual Inspection

Upon completion of the final cleaning, the Contractor shall notify the Contracting Officer and request a final visual inspection with the Contracting Officer's representative with the criteria in the final cleaning/visual inspection example format sheet located at the end of this section. If the area does not pass the visual inspection, the Contractor shall reclean the area as required by paragraph CLEANUP AND DISPOSAL, at no additional expense to the Government. Final clearance testing shall not proceed until the Contracting Officer has accepted the final cleaning by the Contractor.

### 3.6.3 Final Clearance Testing

Final clearance surface dust sampling in accordance with HUD 0005646 shall be conducted after a thorough cleanup has been completed in accordance with the following:

- ..... a. On-site paint removal throughout the unit. Three samples shall be taken (one from a window sill, one from a window well, and one from the floor) in each area. An area is defined as a room, closet, pantry, hall, portion of a room, etc.
- ..... b. On-site paint removal in limited areas. Three samples shall be taken (one from a window sill, one from a window well, and one from the floor) in each area abated and one sample outside the containment area (within ten feet in 20 percent of the abated units). Pre-abatement wipe samples shall be compared to determine if dust from the abatement process has contaminated non-abated areas. The Contractor shall cleanup these areas if contamination from the abatement process occurs.
- ..... c. Replacement and/or encapsulation only throughout the unit. One wipe sample shall be taken in each area divided equally between window wells, window sills, and floors.
- ..... d. Replacement and/or encapsulation only in limited areas. One wipe sample shall be taken in each abated area divided equally between window wells, window sills, and floors, and one wipe sample outside the containment area within ten feet in 20 percent of the abated units.
- ..... e. Exterior abatement. At least one wipe sample shall be taken on a horizontal surface in part of the living area such as a front porch.

Retests. Should laboratory results indicate that the wipe test clearance level is exceeded, the Contractor shall reclean the affected area, at no additional cost to the Government. The Contractor shall utilize specified cleaning methods. Retesting will then be performed to determine if specified clearance criteria was met. The Contractor shall pay for additional testing and shall provide, at no additional cost, a recleaning of an affected area until the clearance level is achieved.

### 3.6.4 Certification

The Competent Person shall certify in writing that inside the LBP control area and the area external to the LBP control area met final clearance requirements.

### 3.6.5 Removal of Control Area

After approval of the final clearance certification, and when authorized by the Contracting Officer, the LBP control area, containment barriers, and control structures roped-off boundary and warning signs shall be removed.

### 3.6.6 Disposal

#### 3.6.6.1 Toxicity Characteristic Leaching Procedure (TCLP) Results

The results of the Pilot Abatement Project and/or TCLP analysis performed during abatement shall be used to determine disposal procedures.

#### 3.6.6.2 Contaminated Waste

Lead-contaminated waste, scrap, and debris shall be disposed of as follows:

- ..... a. Lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing, which may produce airborne concentrations of lead particles shall be stored in U.S. Department of Transportation 49 CFR 178 approved 55 gallon drums. Each drum shall be labeled to identify the type of waste as defined in 49 CFR 172 and the date lead-contaminated wastes were first put into the drum. The Uniform Hazardous Waste Manifest forms from Federal and state agencies shall be obtained and completed. Land disposal restriction notifications shall be as required by 40 CFR 268. The Contracting Officer shall be notified at least 14 days prior to delivery to arrange for job site inspection of the drums and manifests. Lot deliveries of hazardous wastes shall be made as needed to ensure that drums do not remain on the work site longer than 90 calendar days from the date affixed to each drum. The Contracting Officer will assign an area for interim storage of waste-containing drums.
- ..... b. Lead-contaminated waste shall be handled, stored, transported, and disposed of in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265. Land disposal restriction notification shall be as required by 40 CFR 268.

3.6.6.3 Deleted

3.6.6.4 Non-Contaminated Waste

Non-contaminated waste, scrap, and debris shall be disposed of in accordance with Section 01061 ENVIRONMENTAL PROTECTION at off-post disposal areas for other locations.

3.6.7 Disposal Documentation

Written evidence shall be provided that the hazardous waste treatment, storage, or disposal facility is approved for lead disposal by the EPA and state or local regulatory agencies. One copy shall be submitted of the completed manifest; signed, and dated by the initial transporter in accordance with 40 CFR 262.

3.6.8 Title to Materials

Materials resulting from demolition work, except as specified otherwise, shall become the property of the Contractor, and shall be disposed of in accordance with Section 02050 DEMOLITION, except as specified herein.

3.6.9 Payment for Hazardous Waste

Payment for disposal of hazardous waste will not be made until a signed copy of the manifest from the treatment or disposal facility certifying the amount of lead-containing materials delivered is returned and a copy is furnished to the Government.

END OF SECTION

CERTIFICATION OF FINAL CLEANING AND VISUAL INSPECTION

Individual abatement task as identified in paragraph,  
Description of Work \_\_\_\_\_

In accordance with the clearing and decontamination procedures specified in the Contractor's lead hazard abatement plan and this contract, the Contractor hereby certifies that he/she has thoroughly visually inspected the decontaminated regulated work area (all surfaces, including pipes, beams, ledges, walls, ceiling, floor, decontamination unit, etc.) and has found no dust, debris, or lead containing material residue.

BY: (Contractor's signature) \_\_\_\_\_  
Date \_\_\_\_\_  
Print name and title \_\_\_\_\_

(Contractor's On-site Supervisor signature) \_\_\_\_\_  
Date \_\_\_\_\_  
Print name and title \_\_\_\_\_

(Contractor's CIH signature) \_\_\_\_\_  
Date \_\_\_\_\_  
Print name and title \_\_\_\_\_

CONTRACTING OFFICER ACCEPTANCE OR REJECTION

The Contracting Officer hereby determines that the Contractor has performed final cleaning and visual inspection of the decontaminated regulated work area (all surfaces including pipes, beams, ledges, walls, ceiling, floor, decontamination unit, etc.) and by quality assurance inspection, finds the Contractor's final cleaning to be:

..... Acceptable

..... Unacceptable, Contractor instructed to reclean the LBP control work area

BY: Contracting Officer's Representative

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Print name and title \_\_\_\_\_