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Environmental & Sustainability Division



LEAD-BASED PAINT ABATEMENT PROCEDURES

Revised: June 2014

IMPORTANT NOTE:

All contractors submitting bids to the City of Mesa (City) for which lead-based paint (LBP) is required to be abated and noted so in any contract documents, and any abatement contractor performing LBP abatement activities at City facilities or properties shall have working knowledge of the information contained within this Lead-Based Paint Abatement Procedures manual.

This document can be found at the following location:
I:\PROCEDURES\Lead Paint\LBP Abatement Program\2013 LBP Abatement Procedure\2013-08 Lead-Based
Paint Abatement Procedure - Final.docx

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ACRONYMS AND ABBREVIATIONS

CFR - Code of Federal Regulations

City - City of Mesa

ESD - Environmental & Sustainability Division

HVAC – Heating Ventilation & Air Conditioning

HUD - Department of Housing and Urban Development

LBP - Lead-based Paint

mg/kg - Milligrams per Kilogram

mg/L - Milligrams per Liter

mg/cm² – Milligrams per Square Centimeter

OSHA – Occupational Safety & Health Administration

PEL - Permissible Exposure Level

ppm – Parts per Million

RCRA - Resource Conservation & Recovery Act

SRL - Soil Remediation Level

TCLP - Toxicity Characteristic Leaching Procedure

TSDF - Treatment, Storage, and Disposal Facility

ug/ft² - Micrograms per Square Foot

ug/m³ – Microgram per Cubic Meter

USDOT – United States Department of Transportation

USEPA – United States Environmental Protection Agency

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EXECUTIVE SUMMARY

This Lead-Based Paint Abatement Procedures manual (Manual) has been prepared by the Environmental & Sustainability Division (ESD) in response to federal and state regulations detailing the management of such materials at City of Mesa facilities. This Manual is intended to supplement applicable Federal, State and local regulations, and in some cases may be more stringent than such regulations. If compliance with a provision of this Manual would result in the ability to not comply with any requirement established under Federal, State or local regulations, then the regulatory requirement shall take precedence.

GOALS OF THIS MANUAL

The goals of this Manual are to:

- 1. Minimize the generation of lead dust inside City facilities and exposure to City employees, contract workers, and facility visitors during lead abatement activities:
- 2. Minimize the generation of lead and release to ambient air for lead abatement activities occurring in outdoor areas; and,
- 3. To ensure LBP waste is managed properly.

GENERAL REQUIREMENTS

In general, under this Manual, the City requires all abatement of lead-based paint (LBP) coated materials at City facilities or properties to be performed using a USEPA certified firm, certified workers, and in compliance with the abatement work procedures as described in Section 2.0 of this Manual. Contractors shall be made aware of the definitions provided in Section 1.3 of this Manual, because in some cases, these definitions may differ from those provided in the referenced regulations.



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1.0 INTRODUCTION

This Lead-Based Paint Abatement Procedures manual (Manual) has been prepared by the Environmental & Sustainability Division (ESD) in response to federal and state regulations detailing the management of such materials at City of Mesa facilities. This Manual is intended to supplement applicable Federal, State and local regulations, and in some cases may be more stringent than such regulations. If compliance with a provision of this Manual would result in the ability to not comply with any requirement established under Federal, State or local regulations, then the regulatory requirement shall take precedence.

1.1 GOALS OF THIS MANUAL

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1.2 REGULATORY SUMMARY

The United States Department of Housing and Urban Development (HUD), the Occupational Safety and Health Administration (OSHA), and the United States Environmental Protection Agency (USEPA) have developed regulations regarding lead hazards. The USEPA and the United States Department of Transportation (USDOT) regulates the disposal of materials coated with lead.

1.2.1 **OSHA**

OSHA established regulations under Title 29, Part 1926 of the Code of Federal Regulations (CFR) targeting construction activities where an employee may be exposed to lead as cited below.

Title 29: Labor

PART 1926—SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

Subpart D—Occupational Health and Environmental Controls



1926.62 Lead.

- (a) Scope. This section applies to all construction work where an employee may be occupationally exposed to lead. All construction work excluded from coverage in the general industry standard for lead by 29 CFR 1910.1025(a)(2) is covered by this standard. Construction work is defined as work for construction, alteration and/or repair, including painting and decorating. It includes but is not limited to the following:
 - (1) Demolition or salvage of structures where lead or materials containing lead are present;
 - (2) Removal or encapsulation of materials containing lead;
 - (3) New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
 - (4) Installation of products containing lead;
 - (5) Lead contamination/emergency cleanup;
 - (6) Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed, and
 - (7) Maintenance operations associated with the construction activities described in this paragraph.

OSHA also established regulations under Title 29, Part 1910 of the CFR to address occupational exposure to lead for employees of general industry, specifically exempting construction industry.

Title 29: Labor

PART 1910—OCCUPATIONAL SAFETY AND HEALTH STANDARDS (CONTINUED)

Subpart Z—Toxic and Hazardous Substances

1910.1025 Lead.

- (a) Scope and application.
 - (1) This section applies to all occupational exposure to lead, except as provided in paragraph (a)(2).
 - (2) This section does not apply to the construction industry ...

In these standards, OSHA requires that employers assure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (µg/m³) averaged over an 8-hour period. As such, this Manual has been developed to assure that no employee, including City employees occupying facilities where construction activities are taking place, is exposed to lead at concentrations above the OSHA standards during construction activities.

1.2.2 HUD

HUD established regulations under Title 24, Part 35 as part of the Residential Lead-Based Paint Hazard Reduction Act targeting "lead-based paint hazards" in "target housing" as defined below.

TITLE 24--Housing and Urban Development

PART 35--LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL

STRUCTURES



Subpart B--GENERAL LEAD-BASED PAINT REQUIREMENTS AND DEFINITIONS FOR ALL PROGRAMS.

35.110 Definitions.

Dust-lead hazard means surface dust that contains a dust-lead loading (area concentration of lead) equal to or exceeding the levels promulgated by the EPA at 40 CFR 745.65 or, if such levels are not in effect, the standards for dust-lead hazards in § 35.1320.

Lead-based paint hazard means any condition that causes exposure to lead from dust-lead hazards, soil-lead hazards, or lead-based paint that is deteriorated or present in chewable surfaces, friction surfaces, or impact surfaces, and that would result in adverse human health effects.

Soil-lead hazard means bare soil on residential property that contains lead equal to or exceeding levels promulgated by the EPA at 40 CFR 745.65 or, if such levels are not in effect, the standards for soil-lead hazards in § 35.1320.

Target housing means any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless a child of less than 6 years of age resides or is expected to reside in such housing for the elderly or persons with disabilities) or any zero-bedroom dwelling.

Title 40: Protection of Environment PART 745—LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL STRUCTURES

Subpart D—Lead-Based Paint Hazards

745.65 Lead-based paint hazards.

- (b) Dust-lead hazard. A dust-lead hazard is surface dust in a residential dwelling or child-occupied facility that contains a mass-per-area concentration of lead equal to or exceeding 40 μg/ft2 on floors or 250 μg/ft2 on interior window sills based on wipe samples.
- (c) Soil-lead hazard. A soil-lead hazard is bare soil on residential real property or on the property of a child-occupied facility that contains total lead equal to or exceeding 400 parts per million (μg/g) in a play area or average of 1,200 parts per million of bare soil in the rest of the yard based on soil samples.

This regulation requires lead-based paint (LBP) hazard notification, evaluation, and reduction for federally-owned residential property and housing projects receiving federal assistance such as the HUD Community Development Block Grant and HOME programs, rental assistance programs such as the Section 8 project-based and voucher programs, Federal Housing Administration (including insured mortgages), and all other federal housing programs.

The soil hazard established under 40 CFR 746.65 for a play area is equivalent to the soil remediation level (SRL) for residential properties established by the Arizona Department of Environmental Quality.



TITLE 18. ENVIRONMENTAL QUALITY CHAPTER 7. DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIAL ACTION

Appendix A. Soil Remediation Levels (SRLs)

			Re	esidential (mg/l	kg)	Non-
CONTAMINANT	CASRN	Class	O-maile a man		residential (mg/kg)	
			10-6 Risk	10-5 Risk		
Lead	7439-92-1	ca, nc			400	800

1.2.3 <u>USEPA</u>

The USEPA established the Renovation, Repair, and Painting Rule under Title 40, Part 745 which establishes requirements for residential renovation projects, established requirements for the accreditation of training programs and certification of individuals and firms engaged in LBP activities, and established work practice standards for performing such activities. This regulation expands coverage from target housing as defined by HUD to include child-occupied facilities as defined below.

Title 40: Protection of Environment

PART 745—LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL STRUCTURES

Subpart E—Residential Property Renovation

745.83 Definitions.

For purposes of this part, the definitions in § 745.103 as well as the following definitions apply:

Child-occupied facility means a building, or portion of a building, constructed prior to 1978, visited regularly by the same child, under 6 years of age, on at least two different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least 3 hours and the combined weekly visits last at least 6 hours, and the combined annual visits last at least 60 hours. Child-occupied facilities may include, but are not limited to, day care centers, preschools and kindergarten classrooms. Child-occupied facilities may be located in target housing or in public or commercial buildings. With respect to common areas in public or commercial buildings that contain child-occupied facilities, the child-occupied facility encompasses only those common areas that are routinely used by children under age 6, such as restrooms and cafeterias. Common areas that children under age 6 only pass through, such as hallways, stairways, and garages are not included. In addition, with respect to exteriors of public or commercial buildings that contain child-occupied facilities, the child-occupied facility encompasses only the exterior sides of the building that are immediately adjacent to the child-occupied facility or the common areas routinely used by children under age 6.

TITLE 40--Protection of Environment
PART 745--LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL
STRUCTURES

Subpart L—Lead-Based Paint Activities



745.223 Definitions.

The definitions in subpart A apply to this subpart. In addition, the following definitions apply.

Child-occupied facility means a building, or portion of a building, constructed prior to 1978, visited regularly by the same child, 6 years of age or under, on at least two different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least 3 hours and the combined weekly visit lasts at least 6 hours, and the combined annual visits last at least 60 hours. Child-occupied facilities may include, but are not limited to, day-care centers, preschools and kindergarten classrooms.

In general with regard to LBP abatement activities, this regulation requires:

- All firms performing LBP activities to be certified by USEPA;
- 2. All LBP activities be conducted by individuals certified by USEPA;
- A certified supervisor to be onsite during all work site preparation and during the
 post-abatement cleanup of work areas and to be available by telephone, pager or
 answering service, and able to be present at the work site in no more than 2
 hours;
- 4. The certified supervisor and the certified firm employing that supervisor is to ensure that all abatement activities are conducted according to the requirements of the regulation and all other Federal, State and local requirements;
- 5. The certified firm to notify the USEPA prior to conducting lead-based paint abatement activities with that notification being received by USEPA at least 5 business days before the start date of any lead-based paint abatement activities;
- 6. The development of a written occupant protection plan;
- Post-abatement clearance procedures, including clearance sampling, be performed by a certified inspector or risk assessor; and,
- 8. An abatement report be prepared by a certified supervisor or project designer.

The USEPA also established requirements for waste determination procedures for LBP and other lead painted or coated materials under the Resource Conservation Recovery Act under Title 40, Part 261 of the CFR. A waste stream that with a concentration of 5 milligrams per liter (mg/L) or more from a representative sample of the waste stream using the Toxicity Characteristic Leaching Procedure (TCLP) is considered a hazardous waste and must be disposed of such in a hazardous waste landfill or at a permitted treatment, storage, and disposal facility (TSDF).

TITLE 40--Protection of Environment
PART 261--IDENTIFICATION AND LISTING OF HAZARDOUS WASTE
Subpart C--CHARACTERISTICS OF HAZARDOUS WASTE



261.24 Toxicity characteristic.

- (a) A solid waste ... exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure, ... the extract from a representative sample of the waste contains any of the contaminants listed in table 1 at the concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this section.
- (b) A solid waste that exhibits the characteristic of toxicity has the EPA Hazardous Waste Number specified in Table 1 which corresponds to the toxic contaminant causing it to be hazardous.

Table 1 —Maximum Concentration of Contaminants for the Toxicity Characteristic

D008 Lead 7439-92-1 5.0	EPA HW No. 1	Contaminant	CAS No. ²	Regulatory Level (mg/L)
	D008	Lead	7439-92-1	5.

1.2.4 <u>USDOT</u>

The USDOT has established requirements for the transportation of lead waste as being a hazardous substance based on toxicity. Any shipment of over ten pounds of waste determined to be hazardous based on toxicity must be shipped as a hazardous waste.

Title 49: Transportation

PART 172—HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGENCY RESPONSE INFORMATION, TRAINING REQUIREMENTS, AND SECURITY PLANS

Subpart A—General

172.1 Purpose and scope.

This part lists and classifies those materials which the Department has designated as hazardous materials for purposes of transportation and prescribes the requirements for shipping papers, package marking, labeling, and transport vehicle placarding applicable to the shipment and transportation of those hazardous materials.

Subpart B—Table of Hazardous Materials and Special Provisions

Appendix A to § 172.101—List of Hazardous Substances and Reportable Quantities

- 1. This appendix lists materials and their corresponding reportable quantities (RQ's) that are listed or designated as "hazardous substances" under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601(14) (CERCLA; 42 U.S.C. 9601 et seq.).
- 4. Column 1 of TABLE 1, entitled "Hazardous substance", contains the names of those elements and compounds that are hazardous substances. Following the listing of elements and compounds is a listing of waste streams. These waste streams appear on the list in numerical sequence and are referenced by the appropriate "D", "F", or "K" numbers. Column 2 of TABLE 1, entitled "Reportable quantity (RQ)", contains the reportable quantity (RQ), in pounds and kilograms, for each hazardous substance listed in Column 1 of TABLE 1.



	Reportable quantity (RQ) pounds
Hazardous substance	(kilograms)
D004-D043 Unlisted Hazardous Wastes Characteristic of Toxicity:	
Lead (D008)	10 (4.52)

1.3 DEFINITIONS

The following definitions shall be the meaning of these terms anywhere they are used in this Manual unless otherwise noted.

Abatement means the removal or stabilization of LBP coated surfaces or components; removal of lead contaminated dust, permanent enclosure or encapsulation of LBP, replacement of LBP surfaces or fixtures, or removal or permanent covering of soil with lead concentrations equal to or exceeding 5,000 part per million (ppm).

Abatement Contractor means a certified firm contracted directly by the City or subcontracted by a General Contractor for the purposes of abating LBP hazards at City facilities or properties that employs certified personnel (abatement workers, supervisors, etc.) at staffing levels to be able to perform abatement activities in accordance with this Manual and all Federal, State, and local regulations.

Certified abatement worker means an individual who has been trained by an accredited training program and certified by the USEPA pursuant to 40 CFR 745.226 to perform abatement activities.

Certified firm means a company, partnership, corporation, sole proprietorship, association, or other business entity that performs lead-based paint activities to which the USEPA has issued a certificate of approval pursuant to 40 CFR 745.226(f).

Certified inspector means an individual who has been trained by an accredited training program and certified by the USEPA pursuant to 40 CFR 745.226 to conduct inspections for the presence of LBP. Certified inspector training should also provide the



ability to collect samples for the presence of lead in dust and soil for the purposes of abatement clearance testing at regulated facilities ad defined herein.

Certified project designer means an individual who has been trained by an accredited training program and certified by the USEPA pursuant to 40 CFR 745.226 to prepare abatement project designs, occupant protection plans, and abatement reports.

Certified risk assessor means an individual who has been trained by an accredited training program and certified by the USEPA pursuant to 40 CFR 745.226 to conduct risk assessments. Certified risk assessor training should also provide the ability to collect samples for the presence of lead in dust and soil for the purposes of abatement clearance testing at regulated facilities ad defined herein.

Certified supervisor means an individual who has been trained by an accredited training program and certified by the USEPA pursuant to 40 CFR 745.226 to supervise and conduct abatements. Certified supervisor training should also provide the ability to prepare occupant protection plans and abatement reports for abatement activities at regulated facilities as defined herein.

Competent person means one who is capable of identifying existing and predictable hazards, including lead hazards, in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Critical barrier means one or more layers of plastic sealed over all openings into a work area or any other similarly placed physical barrier sufficient to prevent airborne lead-contaminated dust in a work area from migrating to an adjacent area.

Encapsulation means the application of a substance that forms a barrier between LBP and the environment using a liquid-applied coating (with or without reinforcement materials) or an adhesively bonded covering material.

Enclosure means the use of rigid, durable construction materials that are mechanically fastened to the substrate in order to act as a barrier between lead-based paint and the environment.



Facility means any institutional, commercial, public, industrial, or residential structure, installation, building, or real property that is owned and operated by the City of Mesa.

General Contractor means a company, partnership, corporation, sole proprietorship, association, or other business entity that performs construction related services to the City and is solely responsible for the completion of the project in accordance with approved plans, established schedules, and established project costs (for some projects, especially operational projects, the general contractor may also be the abatement contractor).

High-efficiency particulate air (HEPA) filter means a filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.

Lead-Based Paint means a paint or other surface coating that contains lead equal to or in excess of 1.0 milligram per square centimeter (mg/cm²) or 0.5 percent by weight, equivalent to 5,000 ppm.

Occupied facility means a facility, including child-occupied facilities, that is occupied by any personnel other than USEPA LPB trained and certified personnel during abatement activities, or one that is unoccupied but will be re-occupied over the period of a regular work shift by any personnel other than USEPA LBP trained and certified personnel after abatement activities have been completed.

Oversight Consultant means a certified company, partnership, corporation, sole proprietorship, association, or other business entity which is contracted directly by the City that employs certified personnel (inspectors, project designers, risk assessors, etc.) at staffing levels to be able to perform abatement oversight activities for purposes of ensuring that abatement activities are performed in compliance with City requirements (including this Manual and contract specifications), project and abatement plans approved by the City, and in accordance with all Federal, State, and local regulations.

Permissible exposure level (PEL) means employee exposure, without regard to use of respirators, to an airborne concentration of lead of 50 μ g/m³ averaged over an 8 hour period.



Regulated Area means an area established to demarcate areas where abatement activities are being conducted and any adjoining area where debris and waste from abatement activities would accumulate; and a work area within which airborne concentrations of lead dust exceeds, or there is a reasonable possibility they may exceed, normal background levels.

Regulated facility means target housing as defined in 24 CFR 35.86 and 40 CFR 745.223 and child-occupied facility as defined in 40 CFR 745.223.

1.4 REGULATED FACILITIES

The City conducts abatement activities at housing projects receiving federal assistance. As a public entity, the City owns facilities built prior to 1978, that were constructed with the intention of accommodating children 6 years of age or under and where these children may be expected to visit at a frequency that may meet the definition of a child occupied facility. In general, these are facilities operated by the City's Parks, Recreation, and Commercial Facilities Department.

The Abatement Contractor is responsible for determining if any renovation project is occurring at a child-occupied facility.

Title 40: Protection of Environment

PART 745—LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL STRUCTURES

Subpart E—Residential Property Renovation

745.81 Effective dates.

(2) Firms.

- (i) Firms may apply for certification under § 745.89 beginning October 22, 2009.
- (ii) On or after April 22, 2010, no firm may perform, offer, or claim to perform renovations without certification from EPA under § 745.89 in target housing or child-occupied facilities, unless the renovation qualifies for one of the exceptions identified in § 745.82(a) or (c).

In making this determination, the Abatement Contractor may question City facility staff regarding the presence of children and amount of time such children spend at a facility, ask the opinion of the Oversight Consultant or City environmental staff, and reference other sources regarding operations at similar facilities. However, the Abatement Contractor is solely responsible for the final determination.

Abatement activities at regulated facilities must be performed in accordance with all applicable HUD and USEPA regulations and the provisions of this Manual. Where



contradiction between this Manual and the regulatory requirements for regulated facilities exists, the stricter requirement shall take precedence.

1.5 CONTRACTOR RESPONSIBILITIES

This section defines responsibilities of the General Contractor, Abatement Contractor, and Oversight Consultant, and also includes responsibilities referenced elsewhere in this Manual, as they pertain to abatement projects at City facilities and properties.

1.5.1 **General Contractor**

Where the General Contractor is not the Abatement Contractor and has subcontracted the services of the Abatement Contractor, the General Contractor will be responsible for ensuring that the Abatement Contractor does not cause undo increases in project costs or delays in the project schedule. The Abatement Contractor must provide sufficient staff and equipment to complete abatement activities within the approved project schedule and within project costs. Where the Abatement Contractor causes an extension of the schedule as a result of providing insufficient staffing or equipment to complete the work within the approved schedule, the General Contractor, and not the Abatement Contractor, may be charged for some or all of the additional associated costs for the Oversight Consultant.

1.5.2 Abatement Contractor

The Abatement Contractor is solely responsible for compliance with OSHA regulations for its personnel and ensuring that any personnel entering established regulated areas are appropriately USEPA certified. The Abatement Contractor will work with the General Contractor, where applicable, to ensure that abatement activities do not cause undo increases in project costs or delays in the project schedule by providing sufficient staff and equipment to complete abatement activities within the approved project schedule.

The Abatement Contractor shall fully cooperate with the Oversight Consultant during the course of abatement activities. Where issues of non-compliance are identified, the Abatement Contractor shall work with the Oversight Consultant to resolve such issues in an efficient and timely manner. The Abatement Contractor shall provide the Oversight Consultant a 24-hour verbal notification when an inspection or any clearance activity is required. In the event that the Abatement Contractor does not pass any



inspection, the Abatement Contractor may be charged for the expense of the Oversight Consultant for that inspection.

As required in Section 4.1, a detailed schedule of abatement activities must be approved by the City before any abatement activities may be initiated. This schedule will be used by the City to determine the scope of the Oversight Consultant's services and to determine the cost for these services. Changes to the schedule must be made at least 24 hours prior to the performance of the impacted activity. Written notification of schedule changes is required to both the City and the Oversight Consultant. If the Abatement Contractor deviates from the approved schedule without proper prior notification, or the Abatement Contractor causes an extension of the schedule as a result of providing insufficient staffing or equipment to complete the work within the approved schedule, the Abatement Contractor may be charged for some or all of the additional associated costs for the Oversight Consultant.

The Abatement Contractor shall be fully responsible for any regulatory citations or penalties that may be imposed onto it. Should any legal issues arise as a result of non-compliance on the part of the Abatement Contractor, all costs incurred by the City in response to such issues shall be paid in full by the Abatement Contractor. This includes legal fees, engineer/consultant fees, and any penalties or fines that may be imposed onto the City.

1.5.3 Oversight Consultant

The Oversight Consultant is solely responsible for compliance with OSHA regulations for its personnel and ensuring that any of their personnel entering established regulated areas are appropriately USEPA certified. The Oversight Consultant is to ensure that abatement activities are conducted in accordance with contract specifications, approved plans, and applicable regulations. The Oversight Consultant shall provide regular updates on the progress of the abatement activities to the City and shall notify the City when a regulatory agency inspects the project for compliance with LBP regulations.

The Oversight Consultant shall have authority to stop work immediately if the work is not being conducted in accordance with contract specifications, approved plans or regulatory requirements; where lead dust is generated and not being adequately controlled; or where an unsafe condition exists. The Oversight Consultant shall



immediately notify the City where work has been stopped at the discretion of the Oversight Consultant.

The Oversight Consultant shall be fully responsible for any regulatory citations or penalties that may be imposed onto it. Should any legal issues arise as a result of non-compliance on the part of the Oversight Consultant, all costs incurred by the City in response to such issues shall be paid in full by the Oversight Consultant. This includes legal fees, engineer/consultant fees, and any penalties or fines that may be imposed onto the City.



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2.0 ABATEMENT WORK PROCEDURES

This section details City requirements for abatement activities at City facilities. Abatement activities shall be performed in accordance with established project specifications, approved plans, and all applicable Federal, State, and local regulations. Nothing in this section of this Manual overrides the Abatement Contractor established standard operating procedures where those procedures are stricter than the regulations or the City requirements.

2.1 CONTRACTOR REQUIREMENTS

All abatement activities shall be conducted by an Abatement Contractor meeting the definition as provided in Section 1.4 using certified abatement workers and overseen by at least one certified supervisor. The certified supervisor shall also meet the requirements of a Competent Person for safety purposes as defined in Section 1.4.

The Oversight Consultant shall have onsite a person trained as a certified supervisor to ensure that all abatement activities are conducted according to the requirements of all other Federal, State and local requirements and this Manual. The Oversight Consultant shall also have onsite a person trained as a certified inspector and/or risk assessor for the purposes of providing post-abatement clearance services (i.e. visual inspections and clearance sampling). The Oversight Consultant may or may not be requested by the City to be present during all abatement activities.

The Abatement Contractor shall maintain a minimum amount of \$3 million per occurrence / \$5 million aggregate Commercial General Liability insurance, including Contractual Liability. For General Liability insurance, the City of Mesa, their agents, officials, volunteers, officers, elected officials or employees shall be named as additional insured, as evidenced by providing an additional insured endorsement. The Abatement Contractor shall maintain Environmental Pollution Liability insurance with the same limits as required for the Commercial General Liability.

2.2 REGULATED AREAS

Abatement, storage, transportation, and disposal work shall be performed without damaging or contaminating areas adjacent to the regulated area. Where areas of the facility outside of the regulated area are damaged or contaminated from abatement



activities, the Abatement Contractor shall restore such areas to the original condition (unless otherwise specified in the contract plans and specifications) at no additional cost to the City of Mesa.

For all abatement projects, the Abatement Contractor shall establish a regulated area which must, at a minimum, include the following:

- Demarcated in a manner that minimizes the number of persons within the area and protects persons outside the area from exposure to lead dust. Where critical barriers or negative pressure enclosures are used, they may demarcate the regulated area.
- 2. Access to regulated areas shall be limited to certified lead workers and certified supervisors.
- 3. All persons entering a regulated area are required to wear respirators capable of filtering lead dust at lower concentrations than the PEL.
- 4. Persons shall not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the regulated area.

The Oversight Consultant shall approve the establishment of the regulated area prior to the initiation of any abatement activities. The regulated area shall be decontaminated at the completion of the abatement activities and prior to its deconstruction.

2.2.1 Exterior Projects

Exterior regulated areas shall be demarcated with physical boundaries established by roping, taping, or fencing off the area ten (10) feet from, and around, the area where abatement activities are being performed, unless it is impracticable. The regulated area shall be provided with a protective covering of at least two (2) layers of polyethylene sheeting constructed with a minimum thickness of 6 millimeters (mm) over any bare soil, landscaping, or pavement to prevent LBP contaminated dust from impacting the surround ground cover.

Where abatement activities are conducted near a facility's heating, ventilation and air conditioning (HVAC) system intake air sources, the HVAC system will be shut down where possible. If the HVAC cannot be shut down it shall be isolated and air intakes



shall be provided with protective covering of at least a single layer of 6 mm polyethylene sheeting and secured with spray adhesive and/or duct tape.

If LBP dust is generated during abatement activities and cannot be controlled due to site conditions (i.e. winds over 20 mph, visual dust emissions outside the regulated area, or as otherwise determined by the Oversight Consultant or Abatement Contractor certified supervisor), additional engineering controls will be required and may include the installation of a negative pressure enclosure.

The Abatement Contractor may use limited decontamination procedures (providing water only for face and hand washing) or may install a three-stage wet decontamination system for exterior projects (required if a negative pressure enclosure is required to be installed).

2.2.2 Interior Projects

Interior regulated areas shall be demarcated with the use of curtains, portable partitions, or negative pressure enclosures in order to ensure that lead dust or the presence of paint flakes/chips outside the area will not exceed pre-abatement background levels. Equipment and materials that are not to be abated and that can be removed from the proposed regulated area shall be relocated by the City prior to initiation of abatement activities.

Critical barriers must be installed over all openings within the regulated area that will not be removed as part of the abatement activities such as HVAC exhaust and return vents; doorways; windows; floor, wall, and ceiling penetrations, and drop-down ceiling systems by providing a protective covering of at least a single layer 6 mm polyethylene sheeting. The facility's HVAC system(s), or the system supplying air to those parts of the facility where regulated area(s) will be established, will be shut down or otherwise isolated during abatement activities, where possible. Unless otherwise required by the project specifications and approved plans, HVAC components shall be restored to their original condition after completion of abatement activities.

The regulated area shall be provided with protective covering of at least two layers of 6 mm polyethylene sheeting over floors (where abatement activities do not include these surfaces). Polyethylene sheeting shall be firmly attached to the structure and joints shall



be sealed with spray adhesive and/or duct tape. The Abatement Contractor shall install a three-stage wet decontamination system for interior projects.

Negative pressure enclosures will be required where abatement activities that take place within an occupied facility unless the facility components coated with LBP can be removed intact or dismantled as provided in Section 2.4. The purpose of the negative pressure enclosure is to ensure that when abatement activities occur in an occupied facility, that there is a reduced chance that lead contamination will have impacted other parts of the facility, City personnel, or facility visitors.

Negative pressure enclosure for interior projects shall be constructed of two layers of polyethylene sheeting covering over all openings used for access, decontamination, and equipment and waste load out areas. The minimum allowable ventilation rate is one air change every 15 minutes with a pressure differential of 0.02 inches within the enclosure relative to outside the enclosure and the air moving equipment shall be equipped with HEPA filters.

Abatement activities that take place within an occupied facility will be scheduled during a time when the facility is unoccupied and closed to the public to the extent practicable, and would most likely occur outside of normal business hours and/or over weekends.

2.2.3 Soil Abatement

Where soil has been impacted by LBP contamination, abatement would include excavating soils a minimum depth of two inches extending two feet outside of the area of identified impact. Confirmation soil samples will be collected from within the excavated area to ensure that lead-impacted soil has been removed to either residential or non-residential SRLs depending on the use of the property, and taking into account background levels as determined from sampling soils at the facility in a location that could not have been impacted by LBP.

2.3 PROTECTIVE PERSONAL PROTECTION

All persons entering the regulated area must wear appropriate respiratory protection to reduce the exposure to Abatement Contractor and Oversight Consultant personnel and disposable protective clothing to reduce the chance that lead contamination exists outside of the regulated areas.



2.4 METHODS OF ABATEMENT

Where practicable, LBP will be abated using methods that will minimize the disturbance of the LBP coated surfaces.

Facility components with LBP coating may be:

- Removed Intact as long as the LBP remains intact and in good condition, and there are no visual dust emissions during its preparation or removal;
- Dismantled as long as the LBP remains intact and in good condition, control
 measures are used to reduce the generation of LBP dust or fumes during the
 dismantling and removal process, LBP waste is contained to the regulated area,
 and there are no visual dust emissions during its preparation or removal; or,
- Abated removing the LBP coating from the surfacing of each component using other approved methods as provided below.

Prior to proceeding with taking intact removal or dismantling abatement measures, the Abatement Contractor must provide details on the procedures to conduct intact removal or dismantling activities in their pre-job submittal and the Oversight Consultant must approve of the methodology. In addition, during intact removal or dismantling activities, the Oversight Consultant may stop work at any time if the method does not adequately control the generation of LBP dust and/or LBP waste is not contained in the regulated area.

Abatement activities shall not incorporate any of the following approaches:

- 1. Open-flame burning or torching of lead-based paint is prohibited;
- Machine sanding or grinding or abrasive blasting or sandblasting of lead-based paint is prohibited unless used with HEPA exhaust control which removes particles of 0.3 microns or larger from the air at 99.97 percent or greater efficiency;
- 3. Dry scraping of lead-based paint is permitted only in conjunction with heat guns, around electrical outlets, or when treating defective paint spots totaling no more than 2 square feet in any one room, hallway or stairwell or totaling no more than 20 square feet on exterior surfaces; and



4. Operating a heat gun on lead-based paint is permitted only at temperatures below 1,100 degrees Fahrenheit.

Other approved methods of abatement shall be conducted by means of a chemical stripper or approved mechanical removal methods that incorporate adequate engineering controls to prevent the generation of dust or fumes, or the release of paint flakes or chips outside of the regulated area. Abatement activities shall be coordinated with existing work and/or concurrent work being performed in adjacent areas.

2.5 SITE SAFETY

The General Contractor, Abatement Contractor and Oversight Consultant personnel shall attend a pre-construction safety meeting prior to initiating abatement activities. The Abatement Contractor's certified supervisor shall be designated a Competent Person and is 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.

Caution, construction and/or restricted area tape shall be used to define the boundaries of work, material storage, or waste storage areas that are outside of regulated areas. Warning signs shall be provided at facility entrances and approaches to regulated areas. Signs shall be located at a distance from the regulated areas that will allow all personnel to read the sign and take the necessary steps to avoid the area or to take protective actions required before entering the regulated area.

At a minimum, sign language at approaches to regulated areas must state:

- DANGER
- LEAD WORK AREA
- MAY DAMAGE FERTILITY OR THE UNBORN CHILD
- CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
- DO NOT EAT, DRINK OR SMOKE IN THIS AREA
- AUTHORIZED PERSONNEL ONLY

A list of emergency telephone numbers shall be posted at the facility near the entrance to the regulated area. The list shall include numbers of the local hospital, emergency



squad, police and fire departments, City project contact, General Contractor, Abatement Contractor; Abatement Contractor's certified supervisor (24-hour number), Oversight Consultant (24-hour number), and City contact (24-hour number).

2.6 TEMPORARY UTILITIES

Temporary equipment used to provide power, light, air, and water shall be installed properly and safely. The Abatement Contractor shall maintain the security and maintenance of the utility system in the regulated area. In the event of a failure of any utility system, the City will not be responsible for any loss of time or other expense incurred by the Abatement Contractor.

The Abatement Contractor shall provide:

- Backflow protection on all water connections. Fittings shall be removed after completion of work with no damage or alteration to existing water piping and equipment.
- 2. Heavy-duty abrasion-resistant hoses to provide water to the regulated and decontamination areas.
- 3. 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.

2.7 STORAGE OF MATERIALS

Materials shall be stored in a place and manner that protects them from damage and contamination. Plastic materials shall be protected from the cold and from UV light damage. 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 that become contaminated with LBP waste shall be decontaminated or disposed of consistent with Section 3.0. Stored materials shall not present a hazard or an inconvenience to workers, visitors, and/or other occupants and employees of the facility.



2.8 GOOD HOUSEKEEPING

The Abatement Contractor shall make sure that good housekeeping procedures are being followed in regulated areas and material storage and waste disposal areas. Surfaces in the regulated area shall be maintained free of accumulations of paint chips and dust. The spread of dust and debris shall be restricted; waste shall not be distributed over the work area. Dry sweeping 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. Abatement work shall cease during the cleanup. Daily verbal clearance must be obtained from the Oversight Consultant before the Contractor may leave for the day.

2.9 DECONTAMINATION & INSPECTION REQUIREMENTS

Once the Abatement Contractor believes that all of the LBP has been abated from the substrate, the Abatement Contractor shall contact the Oversight Consultant to verify no further abatement activities are required prior to initiating final decontamination operations. After passing the preliminary visual inspection, the Abatement Contractor shall begin final decontamination activities to clean the regulated area of any LBP waste including paint chips, flakes or residues that were generated during the course of abatement, and clean and remove all materials, equipment, and tools used in the abatement activities including materials used to establish a negative pressure enclosure.

Upon completion of the final decontamination, the Abatement Contractor shall notify the Oversight Consultant and request a final visual inspection to ensure that all visible lead based paint waste has been removed. After passing the final visual inspection, the Abatement Contractor will remove all containment barriers, control structures and warning signs.

2.10 MONITORING & CLEARANCE REQUIREMENTS

Air monitoring may be performed at the City's discretion to determine if lead contamination exists prior to abatement, during abatement, or after abatement and before a negative pressure enclosure is deactivated. Additionally, wipe samples may be collected to determine if decontamination procedures in the regulated areas were sufficient to remove all lead contaminated dust. The monitoring methodology shall be



provided by the Oversight Consultant and must be approved by the City prior to the commencement of abatement activities.

All samples shall be analyzed by a laboratory recognized by the USEPA as being capable of performing analyses for lead compounds in paint chip, dust, and soil samples. For air monitoring, a sample is determined to be "clean" where lead concentrations are below 50 μ g/m³ of air. Clearance levels for wipe samples are 40 micrograms per square foot (μ g/ft²) for floors, 250 μ g/ft² for interior window sills, and 400 μ g/ft² for window troughs. Clearance levels for lead in soils at regulated facilities is 400 milligrams per kilogram (mg/kg) and 800 mg/kg for non-residential properties.

2.10.1 Pre-Abatement Baseline Sampling

At the discretion of the City, the Oversight Consultant may collect samples from window sills and doorway entrances where LBP surfaces have not been identified and from soils in the vicinity of where abatement activities are expected to take place in order to determine baseline lead concentrations. After abatement has been completed, the Oversight Consultant may collect post abatement sampling from the same locations using the same sampling procedures to determine if the abatement activities caused any additional impact to the property. If post-abatement concentrations exceed pre-abatement levels, the Abatement Contractor will be required to conduct additional decontamination operations to contaminated areas of the facility and/or abate impacted soils in accordance with Section 2.2.3 and at no additional cost to the City.

2.10.2 In-Process Sampling

At the discretion of the City, the Oversight Consultant may conduct air monitoring in areas adjacent to the regulated area to verify the Abatement Contractor did not cause a release of lead dust from the regulated area to other parts of the facility as part of the abatement activities. The Oversight Consultant may stop abatement activities if air monitoring results are above laboratory detection levels and additional engineering controls will be required.

2.10.3 Post-Abatement Clearance Sampling

For regulated facilities, clearance sampling for lead in dust shall be conducted by employing single-surface sampling or composite-surface sampling techniques; and, at



the City's discretion, may be performed at abatement activities at other City facilities. See Section 2.2.3 for post-abatement clearance sampling for lead-impacted soils.



3.0 WASTE MANAGEMENT & DISPOSAL

All waste generated from abatement activities are to be stored in leak-proof containers and in a secure area at the facility. Waste should be stored in containers that meet US DOT shipping requirements for lead hazardous, and that are appropriate for acceptance by a hazardous landfill or a hazardous waste treatment storage and disposal facility, unless a waste determination has been made prior to abatement activities that the waste is not a hazardous waste.

3.1 WASTE DETERMINATION

The Abatement Contractor shall collect a sample from waste generated from abatement activities, including any facility components that were removed intact or disassembled, to determine the nature of the waste as being non-hazardous unless the Abatement Contractor can demonstrate process knowledge. Process knowledge must be demonstrated in the Abatement Contractor's pre-job submittals (see Section 4.0). Where waste determination sampling is required, sampling activities shall be performed in the presence of the Oversight Consultant. The analytical method and laboratory to be used must be described in the Abatement Contractor's pre-job submittals. All waste must be stored in a secured location at the facility until the results of the waste determination sample are received and approved by the City.

3.2 HAZARDOUS WASTE

If waste determination sampling results in the waste generated from abatement activities is hazardous as defined by regulations established under the RCRA, the Abatement Contractor shall conduct the following:

- 1. The waste shall be placed in appropriate containers and labeled in accordance with the RCRA and USDOT regulations.
- 2. A Uniform Hazardous Waste Manifest shall be completed using the USEPA Facility ID number (if applicable) provided by the City.
- 3. The City shall be notified at least 3 days prior to waste shipment so that the waste containers and the manifest may be inspected.
- 4. A trained representative of the City has signed the waste manifest.



Shipment of hazardous wastes shall be made as needed to ensure that they do not remain at the facility longer than 60 calendar days from the date the waste was generated.

3.3 NON-HAZARDOUS WASTE

Waste that is determined to be non-hazardous through process knowledge or waste determination sampling shall be disposed of by the Abatement Contractor at an approved site.

3.4 DISPOSAL DOCUMENTATION

Completed and approved waste determination and disposal documentation shall be provided by the Abatement Contractor to the City and the Oversight Consultant. Payment for disposal of hazardous waste will not be made until a signed copy of the hazardous waste manifest from the treatment or disposal facility certifying the amount of waste delivered is returned and a copy has been received by the City.



4.0 SUBMITTALS

The City requires the Abatement Contractor to provide pre-job submittals and post-job submittals for all abatement projects.

4.1 PRE-JOB SUBMITTALS

The Abatement Contractor shall submit to the Oversight Consultant all of the information detailed in the subsections detailed below. The Oversight Consultant will review the submittal package for completeness and content and will either approve the package or require revisions. Where an item described below is Not Applicable (NA) to the project, the Abatement Contractor should indicate it is not applicable in the submittal and provide reasons why that item is not applicable. Failure to do so may result in the submittal package not being approved and revisions requested. If the submittal requires revision, the Abatement Contractor will not be entitled to additional payment for those revisions and will be solely responsible for any project delays that result.

The submittals must be organized in a three ring binder with the following tabbed sections. The City has developed a review of content form for the Oversight Consultant to use in determining if the Abatement Contractor has included all necessary items provide below. The Abatement Contractor is strongly encouraged to use that form in preparing their submittal.

4.1.1 Licenses, Certifications, & Statements

In Tab 1, supply the following licenses, certifications, and statements as it pertains to the Abatement Contractor as provided below.

- 1. Arizona Registrar of Contractor License for lead remediation/abatement or equivalent.
- 2. Provide a copy of the certificate of liability insurance form demonstrating general liability and environmental pollution liability coverage.
- 3. Provide a copy of the USEPA lead abatement certified firm certificate with certification number and expiration date.
- 4. Provide a certification signed by an officer of the company stating that the Abatement Contractor has prior experience on abatement projects similar in



nature and extent and is capable of performing the abatement in a satisfactory manner.

- 5. Provide a certification signed by an officer of the company stating that the Contractor's full-time onsite certified supervisor:
 - Meets the Competent Person requirements of 29 CFR 1926.62.
 - Has been trained by an accredited training program and certified by the USEPA pursuant to 40 CFR 745.226 to supervise and conduct lead abatement, and to prepare occupant protection plans and abatement reports.
 - Has been trained in the requirements for shipping hazardous materials including preparing shipping papers, package marking, labeling, and transport vehicle placarding applicable to the shipment and transportation of those hazardous materials pursuant to 49 CFR 172.
 - Has experience in administration and supervision of abatement projects, including work practices, protective measures for building and personnel, disposal procedures, etc.
 - Has had a minimum of 2 years on-the-job experience.

4.1.2 Personnel & Schedule

In Tab 2, supply the following with respect to the Abatement Contractor's personnel conducting abatement activities and the project schedule as provided below.

- 1. Provide contact info and phone numbers (24 hour number where possible) for the general contractor project manager, abatement contractor's project manager, certified lead abatement supervisor, and local fire, police, and medical personnel.
- Submit a list of all personnel who will be conducting abatement activities and include a copy of their certified lead abatement worker and supervisor certificates of completion from a USEPA accredited training course.
- Provide a detailed abatement schedule that specifies the number of full-time staff that will be provided for the project daily; project mobilization; pre-abatement site preparation; abatement; preliminary and final decontamination and clearance; and post-abatement activities (i.e. containment removal, site restoration, demobilization).



4.1.3 Abatement Work Procedures

In Tab 3, supply information on the work procedures, including engineering controls, that will be used during abatement activities as provided below.

- 1. Provide a map illustrating the following:
 - Location of all LBP components, surfaces, and soils to be abated.
 - Regulated area(s).
 - Decontamination areas.
 - Areas requiring a critical barrier.
 - Location and number of air filtration devices.
 - Area(s) where air from filtration devices will be exhausted to the outside ambient air.
 - Area(s) where make-up air will be supplied.
 - Location of utilities to be used as part of the abatement activities (power supply, water supply, drains, etc.).
 - Eating, smoking, and washroom areas to be provided to workers.
- 2. Describe the construction of the regulated area(s) and decontamination area(s) and provide the dimensions of these areas.
- 3. Provide negative air calculations and the amount of air filtration equipment determined to be needed.
- 4. Describe the abatement methods to be used for each LBP containing component or surfacing, including non-disturbance methods, engineering controls to be used to minimize the creation of lead dust emissions, and engineering controls to address employee exposure to lead below the PEL to the extent that such controls are feasible per 29 CFR 1926.62(e).
- 5. Provide a list of equipment and materials to be used in performing abatement activities including, but not limited to, the following:
 - Respirators and cartridges.
 - Protective clothing.
 - Signs and labels.
 - Air filtration devices.*
 - HEPA vacuums or other HEPA systems*
 - Encapsulates (provide MSDSs).
 - Chemicals and associated MSDSs.



- Sprayers and misters.*
- Water filtration systems.*
- Mechanical tools equipped with associated engineering control devices (electric tools must be GFI protected and double insulated).
- Hand tools (scrapers, utility knives, etc.).
- Containment and waste containment (e.g. polyethylene sheeting or bags, 55-gallon drums, etc.).*
- Waste transport (trucks, roll-off bins, etc.).
- Elevating equipment (e.g. scaffolding, lifts, latters, etc.; ladders shall be constructed of wood or fiberglass).

<u>NOTE</u> (*) include brand names, models, capacities, performance characteristics, and other pertinent information

6. Provide a list of all subcontractors.

4.1.4 Material & Waste Management

In Tab 4, supply information on the material and waste management procedures that will be used during abatement activities as provided below.

- 1. Description of housekeeping procedures including:
 - Storage of materials used for abatement to prevent damage or contamination.
 - Daily cleanup procedures for areas within the regulated area(s).
 - Cleanup procedures for areas outside the regulated area(s).
- 2. Provide method for conducting a waste determination and results if a representative sample has already been collected and analyzed.
- 3. Provide the name, address, phone number and permit numbers of all waste disposal facilities that will receive waste from the abatement process including:
 - Hazardous waste facilities for RCRA regulated waste, USEPA identification number, and TSDF permit number (where applicable).
 - Non-hazardous LBP waste streams.
 - Non-hazardous waste streams otherwise generated during abatement activities not contaminated with LBP (i.e. packaging, boxes, etc.).

NOTE: Scrap recycling facilities must provide the City of Mesa with a Certificate of Destruction and method of disposal for all components containing lead based paint.



- 4. Description of housekeeping procedures including:
 - Storage of materials used for abatement to prevent damage or contamination.
 - Daily cleanup procedures for areas within the regulated area(s).
 - Cleanup procedures for areas outside the regulated area(s).
- 5. Spill prevention and response procedures.

4.1.5 OSHA Required Documentation

In Tab 5, provide a signed certification that the Abatement Contractor has developed and implemented the following:

- 1. An exposure assessment in accordance with 29 CFR 1926.62(d).
- 2. A respiratory protection program in accordance with 29 CFR 1926.62(f)(2).
- 3. A medical surveillance program in accordance with paragraphs 29 CFR 1926.62(j)(2), biological monitoring; 1926.62(j)(3), medical examinations and consultations; and, 29 CFR 1926.62(k), medical removal protection.
- 4. A hazard communication program in accordance with 29 1926.62(I) and 29 CFR 1910.1200 as referenced.

4.1.6 **EPA Required Documentation**

In Tab 6, provide a signed certification that the Abatement Contractor has developed and implemented the following:

- 1. The facility does not meet the definition of target housing or a child-occupied facility, where not applicable;
 - **OR**, provide both items below.
- 2. Documentation that a notification was received by USEPA at least 5 business days before the start date of any lead-based paint abatement activities pursuant to 40 CFR 745.227(e)(4(i).
- 3. A written occupant protection plan prepared by a certified supervisor or certified project designer pursuant to 40 CFR 745.227(e)(5).

4.2 POST-JOB SUBMITTALS

After abatement is complete and final waste disposal documentation has been received by the Abatement Contractor, the Abatement Contractor shall supply a post-job submittal to the Oversight Consultant which will include the following information:



- 1. One copy of the completed (signed and dated) hazardous waste manifest or other shipping papers.
- 2. Copies of any analytical results for personnel monitoring.
- A list of any additional personnel conducting abatement activities (i.e. personnel not included in the pre-job submittal) and a copy of their certified lead abatement worker and supervisor certificates of completion from a USEPA accredited training course.
- 4. Sign-in forms for each day providing names of all personnel that enter regulated areas.
- 5. Copies of daily logs.



5.0 REFERENCES

- U.S. Government Printing Office [GPO, 2013(c)]: Electronic Code of Federal Regulations (e-CFR) Title 24, Housing and Urban Development; Part 35 Lead-Based Paint Poisoning Prevention in Certain Residential Structures; http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=8949b22dbd087909d0fa60ea78ece0e3&tpl=/ecfrbrowse/Title24/24cfr35_main_02.tpl
- U.S. Government Printing Office [GPO, 2013(a)]: Electronic Code of Federal Regulations (e-CFR) Title 29: Labor; Part 1910—Occupational Safety And Health Standards (Continued); Subpart Z—Toxic and Hazardous Substances; § 1910.1025 Lead; <a href="http://www.ecfr.gov/cgi-bin/text-idx?type=simple;c=ecfr;cc=ecfr;sid=8f309c0416def29d5edb0784a787118d;region=DIV1;q1=lead;rgn=div8;view=text;idno=29;node=29%3A6.1.1.1.1.1.1.21
- U.S. Government Printing Office [GPO, 2013(b)]: Electronic Code of Federal Regulations (e-CFR) Title 29, Labor; Part 1926 - Safety and Health Regulations for Construction; Subpart D - Occupational Health and Environmental Controls; 1926.26 Lead; <a href="http://www.ecfr.gov/cgi-bin/text-idx?type=simple;c=ecfr;cc=ecfr;sid=375c7b3e9d1c5a27a86f9c004a000642;idno=29;region=DIV1;q1=1926.62;rgn=div8;view=text;node=29%3A8.1.1.1.1.4.13.13
- U.S. Government Printing Office [GPO, 2013(d)]: Title 40--Protection of Environment; Chapter I--Environmental Protection Agency; Subchapter R--Toxic Substances Control Act; Part 745--Lead-Based Paint Poisoning Prevention in Certain Residential Structures; http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=4507e408f1228debdf54fffdf856dc10&tpl=/ecfrbrowse/Title40/40cfr745 main 02.tpl
- U.S. Government Printing Office [GPO, 2013(e)]: Electronic Code of Federal Regulations (e-CFR) Title 49: Transportation; Part 172—Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans; http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=17de98315ba7dd64d1af8bc94d380747&rgn=div5&view=text&node=49:2.1.1.3.8&idno=49



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