

 <b>CITY OF TUCSON</b>	<b>City of Tucson</b> Central Safety Services Number: S-032 Subject:	Page 1 of 19
		Effective Date: March 27, 2012
	<b>Lead Containing Materials</b>	Reviewed/ Revised: January 1, 2013

## 1.0 PURPOSE

To ensure city employees understand the hazards of lead exposure and handling procedures. City Departments shall follow proper procedures when conducting cleaning, maintenance, and repair tasks and any other work that may potentially disturb lead. Failure to follow Federal, State or local regulations, including direction supplied in this policy may result in citation, legal action or monetary penalty to the Controlling Entity and/or subcontractor and shall result in disciplinary action for the employee(s) found in violation.

Lead is regulated by the Occupational Safety and Health Administration (OSHA), 29 CFR 1910.1025, and 29 CFR 1926.62; and the US Environmental Protection Agency (EPA) under the Toxic Substances Control Act; 40 CFR Part 745, Lead; Renovation, Repair, and Painting Program.

This policy shall apply to:

1. The removal of lead-based paint and lead-contaminated dust, the permanent enclosure or encapsulation of lead-based paint, the replacement of lead-painted surfaces or fixtures, and the removal or covering of lead-contaminated soil;
2. All preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures; and
3. Projects for which there is a written contract or other documentation which provides that a firm or an individual will be conducting activities in or to a residential dwelling or child-occupied facility that:
  - will result in the permanent elimination of lead-based paint hazards or
  - are designed to permanently eliminate lead-based paint hazards;
4. Projects resulting in the permanent elimination of lead-based paint hazards conducted by firms or individuals certified in accordance with the Department unless such projects are excluded from the definition of abatement or abatement project;
5. Projects resulting in the permanent elimination of lead-based paint hazards conducted by firms or individuals who or which, through company name or promotional literature, hold themselves out to be in the business of performing lead-based paint activities, or

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6. Projects resulting in the permanent elimination of lead-based paint hazards that are conducted in response to state or local abatement orders.

Note: Abatement does not include renovation, remodeling, landscaping, or other activities **when such activities are not designed to permanently eliminate lead-based paint hazards** but instead are designed to repair, restore, or remodel a structure or dwelling even if such activities may incidentally result in a reduction or elimination of lead-based paint hazards. Abatement does not include interim controls, operations, and maintenance activities or other measures and activities designed to temporarily but not permanently reduce lead-based paint hazards.

## 2.0 SCOPE

Lead is a naturally occurring mineral that is used in building materials and finishes. Lead is a soft, malleable, poor metal (the p-block of the periodic table). It is also counted as one of the heavy metals.

Lead, when ingested inhaled, or adsorbed in sufficient does, is a toxic substance to humans and animals. It damages the nervous system and causes blood and brain disorders. Lead is a potent neurotoxin that accumulates both in soft tissues and the bones.

Lead has been used as a component of paint and pesticides.

Lead poisoning typically results from ingestion of food or water contaminated with lead; but may also occur after accidental ingestion of contaminated soil, dust, or lead based paint.<sup>1</sup>

## 3.0 DEFINITIONS

**Abatement or Abatement Project** means any measure or set of measures designed to permanently eliminate lead-based paint hazards.

**Authorized person:** means any person authorized by the employer and required by work duties to be present in regulated areas

**Certification Examination for Elevated Blood Lead Level Inspector & Visual Lead Hazard Advisor** means an examination written and administered by an authorized representative of the Department.

**Certification Examination for Lead-Based Paint Inspector, Risk Assessor & Abatement Supervisor** means the US Environmental Protection Agency National Certification Examination administered by an authorized representative of the Department.

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**Certified Abatement Worker** means an individual who has been trained and certified by an accredited training program to perform abatement projects.

**Certified Elevated Blood Lead Level Inspector** means an individual who has been trained and certified by an accredited training program to perform elevated blood lead level investigations.

**Certified Firm** means a firm to which an accredited training program has issued a certificate of approval.

**Certified Inspector** means an individual who has been trained and certified by an accredited training program and authorized by the Department to conduct inspections and sample for the presence of lead in dust and soil for the purposes of abatement clearance testing.

**Certified Industrial Hygienist (CIH)** means one certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.

**Child-Occupied Facility** is a building, or a portion of a building, constructed prior to 1978, visited regularly by the same child, under 6 years of age, on at least 2 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 be located in public or commercial buildings or in target housing. Potentially affected trades involved with these facilities may include, but are not limited to:

- Building construction (NAICS code 236), e.g., single family housing, construction, multi-family housing construction, residential remodelers.
- Specialty trade contractors (NAICS code 238), e.g., plumbing, heating, and air-conditioning contractors, painting and wall covering contractors, electrical contractors, finish carpentry contractors, drywall and insulation contractors, siding contractors, tile and terrazzo contractors, glass and glazing contractors.
- Real estate (NAICS code 531), e.g., lessors of residential buildings and dwellings, residential property managers.
- Child day care services (NAICS code 624410).
- Elementary and secondary schools (NAICS code 611110), e.g., elementary schools with kindergarten classrooms.
- Other technical and trade schools (NAICS code 611519), e.g., training providers.
- Engineering services (NAICS code 541330) and building inspection services (NAICS code 541350), e.g., dust sampling technicians.

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**Clearance Examination** means an activity conducted following lead-based paint hazard reduction activities to determine that the hazard reduction activities are complete and that no soil-lead hazards or surface dust-lead hazards, exist in the dwelling unit or worksite. The clearance process includes a visual assessment and collection and analysis of environmental samples by a certified individual or firm.

**Clearance Levels** means the maximum allowable concentrations of lead on environmental surfaces. For post-abatement clearance, the maximum levels of lead in dust on horizontal surfaces are as follows: floors 100 micrograms per square foot, window sills 500 micrograms per square foot using dust wipe sampling methodology.

**Common Area** means a portion of a building that is generally accessible to all occupants and may include, but is not limited to, a hallway, stairway, laundry or recreational room, playground, community center, garage, or boundary fence.

**Component or Building Component** means a specific design or structural element or a fixture of a building, residential dwelling, or child-occupied facility that is distinguished from others by form, function, and location and may include, but is not limited to: interior components such as ceilings, crown moldings, walls, chair rails, doors, door trim, floors, fireplaces, radiators and other heating units, shelves, shelf supports, stair treads, stair risers, stair stringers, newel posts, railing caps, balustrades, windows and trim including sashes, window heads, jambs, or sills or stools and troughs, built-in cabinets, columns, beams, bathroom vanities, counter tops, and air conditioners and exterior components such as painted roofing, chimneys, flashing, gutters and downspouts, ceilings, soffits, fascia, rake boards, corner-boards, bulkheads, doors and door trim, fences, floors, joists, lattice work, railings and railing caps, siding, handrails, stair risers and treads, stair stringers, columns, balustrades, window sills or stools and troughs, casings, sashes, and wells, and air conditioners.

**Competent Person (CP):** One who is capable of identifying existing and predictable 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 those hazards.

**Containment** means a process to protect workers and the environment by controlling exposure to the lead-contaminated dust and debris created during an abatement project.

**Contractor:** A licensed contractor or the General Services Department, Facilities Management Division (FM) designated and contracted by the department (Controlling Entity) to perform lead identification and sampling, and when resulting in a positive test have the necessary qualifications/certifications to perform lead encapsulation, and/or abatement (demolition) activities and disposal in accordance with applicable regulation, prior to the performance of

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work. The Contractor may be a contributing party in any lead-related citation event.

**Controlling Entity:** is the city department or division that occupies a city-owned facility and is responsible for hiring a subcontractor to perform building maintenance, repair/remodel, demolition, project management or lead mitigation. The Controlling Entity is the ultimate responsible party in a lead-related citation event.

**Department** means the City organization that is the Controlling Entity for all aspects of lead management in their occupation of city-owned facilities.

**Deteriorated Paint** means paint that is cracking, flaking, chipping, peeling, or otherwise separating from the substrate of a building component.

**Elevated Blood-Lead Level** means a confirmed concentration of lead in whole blood of twenty micrograms of lead per deciliter of whole blood for a single venous test or of fifteen to nineteen micrograms of lead per deciliter of whole blood in two consecutive tests taken three to four months apart.

**Encapsulant** means a substance that forms a barrier between lead-based paint and the environment using a liquid-applied coating, with or without reinforcement materials, or an adhesively bonded covering material.

**Encapsulation** means the application of an encapsulant.

**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.

**EPA** means the United States Environmental Protection Agency.

**Exposure Levels** are the levels OSHA has established (in compliance with OSHA 29 CFR 1926.62) as:

- permissible exposure limit (PEL) of 50  $\mu\text{g}/\text{m}^3$  (50 micrograms of lead per cubic meter of air) averaged over an eight-hour period, and
- action level of 30  $\mu\text{g}/\text{m}^3$ .

**Firm** means a company, partnership, corporation, sole proprietorship, association, or other business entity that conducts lead-based paint abatement or abatement projects.

**Inspection** means a surface-by-surface investigation to determine the presence of lead-based paint and the provision of a report explaining the results of the investigation.

**Interim Controls** means a set of measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards, including specialized cleaning, repairs, maintenance, painting, temporary containment,

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ongoing monitoring of lead-based paint hazards or potential hazards, and the establishment and operation of management and resident education programs.

**Lead-Based Paint** means paint or other surface coatings that contain lead equal to or in excess of one milligram per square centimeter or more than five-tenths of one percent by weight in a residential dwelling or child-occupied facilities.

**Lead-Based Paint Activities** means: in the case of target housing and child-occupied facilities; inspection, risk assessment, disturbance, and abatement.

**Lead-Based Paint Hazard** means any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated paint or is present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as identified by the Director.

**Lead-Based Paint Profession** means one of the specific types or categories of lead-based paint activities identified in the Residential Lead-Based Paint Professions Certification Act for which individuals may receive training from an accredited training program and become certified by the Department.

**Lead-Contaminated Dust** means surface dust in a residential dwelling or child-occupied facility that contains an area or mass concentration of lead at or in excess of 100 micrograms per square foot.

**Lead-Contaminated Soil** means bare soil on residential real property or on the property of a child-occupied facility that contains lead at or in excess of 400 parts per million (400 milligrams per kilogram).

**Permanently Covered Soil** means soil which has been separated from human contact by the placement of solid barrier consisting of relatively impermeable materials, such as pavement or concrete. Grass, mulch and other landscaping materials are not considered permanent coverings.

**Person** means any natural person, including any individual, corporation, partnership, or association, any state, or political subdivision thereof, any interstate body, and any Department, agency, or instrumentality of the United States Government.

**Project Manager:** The individual designated and/or contracted by the department (Controlling Entity) to oversee/manage building remodeling, renovation or building equipment/component replacement and has knowledge to identify suspect lead containing materials. This individual shall require (when necessary) lead identification and sampling, and when resulting in a positive test shall, shall oversee/manage lead encapsulation or demolition and disposal, according to applicable regulations, into the project scope.

**Qualified Personnel (QP):** Employees authorized by training and title who possess certification in inspection, identification, sampling, mitigation, removal

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and disposal of lead containing material under conditions specified by OSHA and the EPA.

**Reduction** means measures designed to reduce or eliminate human exposure to lead-based paint hazards through methods including interim controls and abatement.

**Regulated area** means: an area established by the employer to demarcate areas where lead abatement work is conducted, and any adjoining area where debris and waste from such abatement work accumulate; and a work area within which airborne concentrations of lead containing dust, exceed or there is a reasonable possibility they may exceed the permissible exposure limit.

**Release:** means any event (planned or an emergency), that releases or has the potential to release lead containing material into the environment during;

- Planned: Remodel, renovation, maintenance or demolition
- Emergency: Fire, explosion, flood, facility damage

**Removal** means all operations where lead based paint or lead containing materials are taken out or stripped from structures or substrates, and includes demolition operations.

**Renovation** means the modifying of any existing structure, or portion thereof.

**Repair** means overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of lead containing materials attached to structures or substrates.

**Residential Dwelling** means a detached single-family dwelling unit, including attached structures such as porches and stoops, or a single-family dwelling unit in a structure that contains more than one separate residential dwelling unit which is used or occupied or intended to be used or occupied, in whole or in part, as the home or residence of one or more persons.

**Risk Assessment** means an onsite investigation to determine the existence, nature, severity, and location of lead-based paint hazards and the provision of a report by the individual or the firm conducting the risk assessment, explaining the results of the investigation and options for reducing lead-based paint hazards.

**Successfully Pass** means answering correctly seventy percent of the exam questions on either the certification examination or the end of course examination.

**Supervisor/Project Coordinator:** is a City employee with the authority to "hire, transfer, suspend, lay-off, recall, promote, discharge, assign, reward, or discipline other employees, or to responsibly direct them, or to adjust their grievances, or effectively to recommend such action" so long as this authority requires the use of independent judgment.

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**Target Housing** means any housing constructed prior to 1978, except housing for the elderly or persons with disabilities unless one or more children six years of age or under resides or is expected to reside in such housing for the elderly or persons with disabilities, or any zero-bedroom dwelling.

**Training Curriculum** means an established set of course topics for instruction in an accredited training program for a particular lead-based paint profession designed to provide specialized knowledge and skills.

**Training Program Manager** means the individual responsible for administering an accredited training program and monitoring the performance of principal instructors and guest instructors.

**Visual Assessment** means looking for, as applicable: deteriorated paint, visible surface dust, debris and residue as part of a clearance examination.

**Visual Lead-Hazard Screen** means a visual assessment to determine the presence of deteriorated paint or other potential sources of lead-based paint hazards in a residential dwelling or child-occupied facility. Visual lead-hazard screen includes a written report explaining the results and limitations of the assessment. The written report will be provided to the person requesting the inspection, the residents of the dwelling, and the owner of the dwelling or child-occupied facility. A certified visual lead-hazard advisor shall retain a copy of the report in his or her files for three years.

#### **ACRONYMS:**

**ADEQ:** Arizona Department of Environmental Quality

**DOT:** Department of Transportation

**EPA:** Environmental Protection Agency (United States government agency)

**NAICS:** North American Industry Classification System

**PDEQ:** Pima County Department of Environmental Quality

## **4.0 RESPONSIBILITIES**

### **A. Department**

1. The Department shall serve as the Controlling Entity for all aspects of lead based paint management in their occupation of city-owned facilities.
2. The Department Director shall appoint a Competent Person (CP) and/or Supervisor with the necessary training and authority to ensure this policy is followed by all Supervisors, employees, and their subcontractors performing work for the Department and to stop or alter unsafe work procedures that are in conflict with this procedure.
3. The department, as the Controlling Entity (CE), shall be responsible for ensuring that all Federal, State and local regulations regarding lead

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identification, sampling, abatement, and disposal are met by the department and/or any contractor.

4. The department, as the Controlling Entity shall create and maintain a repository record of all projects involving building renovation, remodel or demolition and shall document all lead testing, results, and disposal methods performed by the department or the contractor hired to perform lead-related work.
5. The department, as the Controlling Entity shall neither allow nor condone work to be performed on or in facilities that are know to contain or may contain lead based materials by employees or persons representing contractors or subcontractors without proper training and certifications.
6. The department, as the Controlling Entity shall be prohibited from directing non-certified employees to perform lead based material abatement work and shall only hire a licensed and certified contractor to perform lead abatement and disposal.
7. Departments shall provide and facilitate training time for qualified personnel and awareness training for non-qualified employees.

#### **B. Competent Person - Lead**

1. The Competent Person shall be responsible for evaluating facilities and work practices that involve potential lead exposure to employee and if suspect materials are identified; contact Central Safety Services to determine and/or confirm a lead sampling and testing strategy has been implemented if historical lead assessment/testing records are not available from FM (Call FM at 791-5111-ext 3141).
2. If Lead testing records are not included, or do not exist in the FM building file, and suspect lead containing material is present, then lead testing shall be required to determine the presence or absence of lead. In instances where testing is required; all work shall be performed by a contractor, and shall be documented and maintained in the building file at department's expense.

**Note:** If lead testing records are not included, or do not exist in the FM building archive file, then lead testing will be required to determine presence or absence of lead. All testing must be performed by a licensed Qualified Person (QP) or contractor. The testing procedures and results shall be documented, with reports retained in the FM building records archive. The Controlling Entity shall be responsible for all costs associated with the lead testing and abatement activities.

#### **C. Supervisor/Project Coordinator**

1. Supervisors shall ensure that only qualified personnel are assigned to duties involving lead abatement. Supervisors shall ensure that regulated lead waste is disposed in accordance with State and Federal regulations.

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2. Supervisors shall ensure that where lead has been identified and posted; employees shall not disturb or otherwise alter material associated with the notice and shall only perform cleanup only after consultation with the department Competent Person to determine acceptable methods.
3. Supervisors shall assume the potential for lead prior to assigning employee work that would involve renovation or demolition of facilities or material that may contain lead. Where suspect materials may be present; the supervisor shall contact the Competent Person for the department and/or Central Safety Services for assistance.
4. Supervisors shall ensure that employees that are known to come into contact with lead-containing materials, specifically Police, Fire and General Services – Facilities Maintenance employees, shall wear the proper Personal Protective Equipment (PPE) and shall wash their hands prior to eating, drinking, applying sunscreen or cosmetics after handling materials potentially contaminated with lead.

#### **D. Employees**

1. Employees shall not disturb materials that have been identified and/or marked as containing lead. Employees shall not knowingly dispose of regulated lead waste.
2. Employees shall wear the proper Personal Protective Equipment (PPE) and shall wash their hands prior to eating, drinking, applying sunscreen or cosmetics after handling materials potentially contaminated with lead. Affected employees specifically include:
  - a. Commissioned Police Personnel discharging weapons on the firing range;
  - b. Non-commission Police Personnel (Crime Lab) involved in the test firing of weapons;
  - c. Commissioned Fire Personnel upon return from the fire ground;
  - d. General Services – Facilities Maintenance Trades Personnel directly involved in activities related to lead mitigation and/or abatement.

#### **E. General Services**

1. General Services Department Facilities Management (FM) will assist departments by maintaining records on lead testing for city-owned facilities. **Departments shall ensure that FM receives a copy of any and all lead testing performed on city-owned facilities and results to be included in the building file.**
2. General Services Department, Facilities Management Division (FM) may serve as the contractor for the department (Controlling Entity) and when

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so contracted, shall be responsible for lead assessment and testing of suspect lead containing material and shall perform abatement prior to any maintenance, demolition, remodel, repair, or building system component/equipment replacement.

3. General Services, Architecture and Engineering Division (A&E) may serve as the Project Manager for the department (Controlling Entity). When A&E is utilized by the CE they shall be responsible for lead assessment and testing of all suspect material and shall contract for lead encapsulation, and/or removal (abatement) and disposal.

#### **F. Housing and Community Development**

Housing and Community Development shall coordinate lead procedures for public housing facilities and shall ensure that all sampling, testing, abatement, and disposal is performed by licensed and certified entities and work performed is conducted by trained and authorized personnel under the guidelines set forth by Housing and Urban Development (HUD), which includes the disposition of all regulated lead waste. The Renovation, Repair, and Painting (RR&P) rule in Section 402 (c) (3) of the Toxics Substance Control Act (TSCA) may also apply to selected facilities maintained by Housing and Community Development.

#### **G. Central Safety Services**

Central Safety Services shall provide advice and counsel in determining identification and testing strategies for potential lead containing materials where a Competent Person does not exist for a department and where facilities are not under the direct management of the General Services Department, Facility Management Division.

### **5.0 EDUCATION AND TRAINING**

- A. Central Safety Services shall convey Awareness Training for all employees during the new hire process. This training shall include:
  - Health effects of lead exposure.
  - Employee Response to an Emergency Release of lead containing material/dust in COT facilities.
- B. Central Safety Services shall conduct training for affected personnel (Supervisory and Management) on the policies and procedures listed in this Directive, and including:
  - Identification of known (previously identified) locations of lead-containing materials in COT facilities
  - Recognition of lead-containing materials damage and deterioration.
  - Response to an Emergency Release of lead-containing materials in COT facilities.

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- Procedures for quantifying the presence of lead-containing materials prior to Repair, Remodel (renovation) or Demolition (Removal) of COT facilities.
- Personal Protective Equipment and Health Monitoring programs for blood serum levels in any activity determined by testing or qualification to approach or exceed Permissible Exposure Limits (PEL) as set by the Occupational Safety and health Administration (OSHA)

C. Central Safety Services shall coordinate awareness training for Qualified Personnel according to OSHA standard.

## 6.0 GENERAL

### A. Prohibited Work Practices

1. Departments, except those with employees trained or certified in lead abatement and/or specific lead-related work practices, are prohibited from performing work (disturbing) or directing employees to perform work where lead-containing materials are known to be present or where there is a potential for lead-containing materials to be present, including:
  - a. Sanding, cutting, hammering, or drilling through lead-containing materials in flooring, walls, doors, and ceiling materials.
  - b. Disturbance of pipe and other mechanical systems that may be painted with lead containing paint.
  - c. Dry-sweeping mechanical rooms or areas that may contain lead-containing materials.
  - d. Utilizing compressed air to remove (blow) lead dust from a person or work surface.

### B. Renovation, Remodel or Demolition (Planned Event)

Departments, as the Controlling Entity, shall consult with the department repository record and/or with Facilities Management (FM) building file on the presence of lead-containing materials at the site where work is to be performed. If a test and result record cannot be found, departments shall ensure that **prior** to any renovation, remodel or demolition of existing city facilities that a determination of the presence or absence of lead-containing materials is considered and addressed. Suspect material cannot be presumed negative by year of installation and shall be tested and cleared prior to commencement of any work. When lead-containing materials material is identified and confirmed by testing, only qualified personnel or a Certified lead-containing materials abatement Contractor shall encapsulate or remove lead-containing materials.

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**1. Buildings or Structures managed under the Facilities Management Division**

- a. Departments with facilities (buildings or structures) under management of the General Services Department (GSD) Facilities Management Division (FM) shall contact FM prior to performing repair, renovations or demolition work.
- b. For work assigned to FM, the presence of lead-containing materials shall be evaluated by FM supervision which maybe delegated to the FM Competent Person and the presence of lead-containing materials shall be ruled out prior to any work being performed. If a lead-containing materials hazard is encountered, all inspection documents shall be archived by FM in the work order archive file.
- c. In cases where the department, as the Controlling Entity elects to hire a Contractor to perform building renovation, remodeling, or conduct demolition work *in substitution* of the GSD staff, the department shall ensure the presence of lead-containing materials shall be ruled out prior to any work being performed. The results of lead testing shall be documented and delivered to FM for the GSD building archive records file.
- d. All lead-containing materials sampling and testing shall be performed in accordance with Section 6.0, Paragraph B and C of this policy.

**2. Buildings or Structures under Contract Management**

- a. Departments, as the Controlling Entity with facilities (buildings or vertical structures) owned by the City, but managed by a building management company, shall notify FM prior to performing repair, renovations, or demolition work.
- b. Facilities Management may be able to assist departments by reviewing any previous building records on file for lead-containing materials testing. In all cases where work will be performed, the presence of lead-containing materials shall be ruled out by the building management company or by a qualified contractor. The department choosing to perform work shall (on the department's behalf) send sample collection and testing result documentation to FM for building records archive file.
- c. All lead-containing materials sampling and testing shall be performed in accordance with Section 6.0, Paragraph B and C of this policy.

**3. Projects under the control and management of General Services – Architecture and Engineering Division (A&E)**

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A & E shall evaluate projects (building additions, renovations, and demolitions) for the presence of lead-containing materials prior to authorizing any work to be performed and documented for file. All lead-containing materials sampling and testing documentation/reports shall be sent to FM for the building records archive file.

### **C. Sampling**

1. The General Services Department shall have a Competent Person qualified by title and training to evaluate the presence of lead-containing materials in City facilities, based upon factors related to age of the building or structure and experience with construction materials. The Competent Person may also be qualified to obtain lead-containing materials samples for testing by the on-call City Industrial Hygienist and/or contracted laboratory certified to perform testing on suspect lead-containing materials.
2. The Architecture and Engineering Division shall have Qualified Personnel authorized by training and title to obtain suspect lead-containing materials samples for testing by the on-call/City Industrial Hygienist or contracted laboratory certified to perform testing on suspect lead-containing materials.
3. Departments, as the Controlling Entity with city-owned facilities under management of a building management company, or departments, as the Controlling Entity that elect to have repair, remodel or demolition work performed by a subcontractor shall ensure that lead-containing materials sampling is performed by a licensed Contractor and testing is performed by an Industrial Hygienist or laboratory certified to perform testing on suspected lead-containing materials.
4. Any sampling performed shall be performed in full compliance with all OSHA, Federal, State, and local regulations. Person(s) collecting lead-containing materials samples shall do-so wearing Personal Protective Equipment and shall not expose any City staff or member of the public to lead-containing materials while obtaining samples.
5. Samples shall be obtained and placed in sealed envelopes or similar to prevent employee exposure. Documentation of the sampling sites in the form of specific site identification, material description, measurements and/or photographs shall be documented for building record archive file. Chain-of-custody forms shall be utilized when submitting samples for lead-containing materials testing to the Industrial Hygienist and/or the contract laboratory certified to perform testing on suspected lead-containing materials.

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#### **D. Testing**

1. The General Services Department (FM and A&E) shall retain (in direct consultation with Central Safety Services) an Industrial Hygienist and/or a contract laboratory certified in the testing of suspect lead-containing materials material to perform lead-containing materials testing on city-managed facilities on behalf of Facilities Management (FM) and projects under the control and management of the A & E Division.
2. Departments, as the Controlling Entity, with City-owned facilities under the management of a building management company shall be responsible for hiring a licensed contractor for sampling and an independent Industrial Hygienist or a laboratory certified in testing for lead-containing materials, or shall contract with the building management company for those professional services to ensure lead-containing materials testing is performed prior to commencement of any work.
3. The results from **any and all** testing performed on city facilities, including negative results for lead-containing materials, shall be forwarded to the General Services Department for inclusion in the building records archive file.
4. A **negative** lead-containing materials test shall mean work may proceed, providing notification of work to be performed has been made to FM and any building or demolition permits required to perform work have been secured by the department.
5. A **positive** lead-containing materials test shall require an evaluation of abatement strategies that include removal of lead-containing materials prior to demolition, containment barriers for remodel/renovation or encapsulation and posting of notice to prevent lead-containing materials disturbance. The results of the evaluation shall be included with testing documentation and results submitted to General Services for the building records archive file.

#### **E. Documentation**

- 1, General Services Department shall serve as the central repository of all testing records performed on all city-owned facilities regarding lead-containing materials. Abatement strategies for lead-containing materials, when performed, shall be included in the building record archives file.
2. Departments shall retain a copy of all laboratory lead-containing materials testing and results for their file. A copy shall be sent to General Services Department for the building record archives file.

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#### **F. Lead-Containing Materials Program**

1. General Services shall maintain the city lead-containing materials program limited to city-owned facilities under management and control of FM. The lead-containing materials program shall include the following procedures for the Competent Person, Qualified Personnel and employees involved in lead abatement:
  - a. Respiratory Protection – OSHM IH-001
  - b. Hazard Communication - OSHM – S-20A
  - c. Medical Surveillance – OSHM IH-005
2. The lead-containing materials program shall also include the following procedures for city facilities undergoing lead abatement:
  - a. Emergency Response and Fire Prevention – OSHM S-20B

#### **G. Abatement**

1. For lead-containing materials abatement work performed by FM, the Competent Person shall ensure work is performed as delineated in the General Services Department procedures for lead-containing materials.
2. For lead-containing materials abatement work performed by a department, as the Controlling Entity utilizing a building management company or licensed contractor, the department shall ensure the Competent Person for the site is performing abatement according to all applicable OSHA Standards and EPA regulations.
3. The Competent Person (CP) for any lead-containing materials abatement shall conduct job site safety inspections, personal air monitoring, and safety meetings. In addition, the CP shall maintain daily employee logs, waste disposal records, and MSDS sheets for all products brought to the site. All records and documentation shall be kept on site until completion of the abatement. After termination of the abatement, documents shall then be held for file for the length of time stipulated by applicable regulations. The City reserves the right to review and/or request copies of any documentation associated with abatement performed on city facilities by Contract Vendor.
4. The Competent Person for any lead-containing materials abatement shall ensure that packaging, labeling, and disposing of all lead-containing materials waste, whether performed by City staff of contractors, is performed in accordance with DOT, EPA, ADEQ and PDEQ requirements.

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## **H. Contractor**

1. City of Tucson may contract for the services of outside consultants and contractors for significant lead removal and emergency abatement work. These firms shall be licensed as a contractor by the State of Arizona.
2. The Contractor shall ensure compliance with all PDEQ regulations, and complete all PDEQ Forms for abatement projects, small-scale incidental maintenance blanket projects, large-scale blanket projects, and emergency projects within the timeframes required by the agency.
3. In special conditions the Contractor may advise the city on how to get waivers from regulatory agencies, if required, when emergency abatements are performed or when requesting to deviate from required practices specified in the regulations or from work practices specified in the original notification.
4. The Contractor must obtain waivers from PDEQ for emergency abatements or any other situation that may require notifying PDEQ of revisions to the notification, such as the need to change project start dates, duration, etc., and for ensuring that the notification is accurate and valid throughout the project.
5. The Contractor shall provide the City (General Services Department and Environmental Services) with a complete documentation report that includes the original waste disposal and documentation form, notification, clearance results, if applicable, and a copy of the invoice.

## **I. Consultants**

1. Any consultant hired by the department, as the Controlling Entity, the building management company, or the General Services Department to review suspect or confirmed lead shall be licensed or certified in the State of Arizona.
2. A certified Lead Contractor may be contracted to develop lead removal specifications or project designs for large-scale or other projects.
3. A certified lead monitor/Industrial Hygienist shall be on site to conduct final air clearance sampling when required after an abatement project and will provide the controlling entity with the original, complete report, including project log and results from the certified laboratory.

## **J. Emergency Release**

1. An Emergency Release shall be declared when an unexpected or unplanned incident occurs that causes damage to a facility resulting in

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the release of lead containing materials or dust and potential employee exposure, such as:

- Fire
  - Explosion
  - Water Leak or Water Intrusion (Flood)
  - Accident or Storm Damage
2. A lead certified Contractor or Contract Industrial Hygienist will be immediately contacted in the event of an Emergency Release.
  3. For buildings under Facilities Management (FM) control, FM shall be responsible for shutting down or isolating the HVAC system to prevent lead containing dust from contaminating adjacent areas. The mechanisms contributing to the release (air-handling systems, machinery, etc) shall be secured by means of a lock-out tag-out system to minimize further dust release, and, if possible, shut off the steam or water lines, if the emergency involves a leak.
  4. For buildings under management contract, the department, as the Controlling Entity shall contact the building management contractor to shut sown or isolate the building HVAC system.
  5. The department, as the Controlling Entity shall prevent unauthorized people from entering the lead impacted emergency area.

## 7.0 **ADVICE AND COUNCIL**

Central Safety Services shall annually review and revise this document in conjunction with Environmental Services, Engineering and Technical Support and shall consult with federal and local regulations regarding lead-containing-materials waste disposal.

### **Lead Resources:**

- National Lead Information Center : (<http://www.epa.gov/oppt/lead/pubs/nlic.htm>) - Provides the general public and professionals with information about lead hazards and their prevention.
- EPA - <http://www.epa.gov/region09/toxic/lead/statusx.html> ,and <http://www.epa.gov/lead/>
- Occupational Safety and Health Administration - (<http://www.osha.gov/SLTC/lead/>)
- State of Arizona (<http://www.azdhs.gov/phs/oeh/invSurv/leadbasepaint.htm>)
- HUD Office of Healthy Homes and Lead Hazard Control – ([http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/healthy\\_homes](http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes)) - HUD lead regulations, compliance assistance information, educational resource, technical studies, grant information, community outreach / news.

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- EPA's Lead Renovation Repair and Painting Rule:  
<http://www.epa.gov/lead/pubs/renovation.htm>
- [U.S. Occupational Safety and Health Administration \(OSHA\)](http://www.osha.gov/SLTC/lead/) –  
(<http://www.osha.gov/SLTC/lead/>) - Compliance with OSHA standards, exposure levels, sampling and analysis methods, controlling lead exposure, technical documents, training programs.
- [Centers for Disease Control \(CDC\) Childhood Lead Poisoning Prevention Program](http://www.cdc.gov/nceh/lead/) - (<http://www.cdc.gov/nceh/lead/>) Blood lead screening information including: educational materials, grant programs, research publications, screening guidelines, databases of demographic information.
- [Agency for Toxic Substances and Disease Registry \(ATSDR\) Public Health Statement for Lead](http://www.atsdr.cdc.gov/phs/phs.asp?id=92&tid=22) (<http://www.atsdr.cdc.gov/phs/phs.asp?id=92&tid=22>)
- [National Institute of Occupational Safety and Health \(NIOSH\)](http://www.cdc.gov/niosh/topics/lead/) –  
(<http://www.cdc.gov/niosh/topics/lead/>) Lead exposure in the workplace, health hazard evaluations, guidelines for chemical hazards, OSHA PELs.