

City of Phoenix
LEAD HAZARD CONTROL PROGRAM

CONTRACTOR HANDBOOK

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1. Introduction

The City of Phoenix Neighborhood Services Department (NSD) received a grant from the U.S. Department of Housing and Urban Development (HUD) to conduct lead-based paint hazard control in privately owned priority housing. HUD defines priority housing for this grant as housing built before 1978, that houses low/moderate income families, and that meets HUD's definition of affordable housing (further definition of affordable housing is available). In implementing the program the City of Phoenix has partnered with the Maricopa County Department of Public Health Services and the Arizona Department of Health Services. NSD is conducting the program in its Neighborhood Initiative Areas (NIAs) and the Enterprise Community (EC), which are some of Phoenix's higher risk neighborhoods, in order to better link these efforts with ongoing neighborhood revitalization efforts and housing rehabilitation programs.

Goals of the Lead Hazard Control Program

- What is the extent of the lead hazard problem in Phoenix? The issue of lead poisoning has not been well documented in Phoenix. This program will be collecting data to help answer: what is the extent of childhood lead poisoning in Phoenix and what is the extent and nature of lead hazards (lead in dust, soil, and paint) in Phoenix?
- What actions/strategies are effective and practical for reducing children's exposure to lead in Phoenix? Another important criteria will be to ensure these strategies are easily incorporated into housing rehab activities so that housing rehab remains affordable and we do not have to choose between a new roof and controlling lead hazards.
- What ongoing efforts can be developed that will continue to carry out lead poisoning prevention activities when this demonstration program has finished? This program will work to establish partnerships with other organizations in order to enable them to provide lead poisoning prevention education.
- Raise public and professional awareness concerning the dangers of lead poisoning with the goal of increasing the number of children being tested for lead poisoning.
- Develop a pool of trained and licensed contractors for performing lead hazard control work.

How is lead poisoning harmful to children?

- Lead can affect the development of a child's brain, especially children under 6 years old.
- Lead poisoning typically has no symptoms - you must have your child's blood tested for lead.
- If your child has an elevated blood lead level (≥ 10 ug/dl) and this level is not lowered, your child could suffer from some of these long term effects: learning disabilities, difficulty paying attention, difficulty following instructions, hyperactivity, lower IQ. Higher levels of lead (≥ 60 ug/dl) can cause even more serious problems.
- Children who have had lead poisoning throughout their development have been found to be 7 times as likely to drop out of high school.

How do children become lead poisoned?

- Lead in house dust: playing on the floor & putting their hands in their mouth.
- Lead in soil: playing in dirt & putting their hands in their mouth.
- Flaking lead paint: eating paint chips.

Peeling lead paint, unsafe removal of lead paint, and lead in gasoline all contribute to lead in house dust and soil. These are the most common sources but not the only sources. For more information about sources of lead for children call the Arizona Department of Health Services at: 1-800-367-6412

The City of Phoenix is committed to the goal of preventing childhood lead poisoning. Contractors who are committed to performing lead hazard control in a safe and responsible manner are essential to attaining this goal. We hope you'll join us in our commitment to prevent childhood lead poisoning.

2. Applying to be on the bid list and remaining active on the bid list

The application for being listed as an active bidder is in appendix 2A. Once the information on these forms has been completed and verified by the City, the contractor will be put on the active bid list. Being on the active bid list results in the contractor being called when invitations to bid are released.

Remaining active on the bid list requires the following four conditions:

1. The following items must be current at the time of the invitation for you to be invited (the contractor is responsible for keeping this information up to date):
 - a. All insurance requirements.
 - b. An EPA certified lead abatement supervisor.
 - c. EPA certification as lead-based paint activities firm.
 - d. Contractor licenses appropriate for work being requested.
2. If a contractor is operating 1 crew then they will be listed as active on the bid list as long as they have less than ten units awarded to them that are not yet finished. If operating 2 crews then they will be listed as active as long as they have less than nineteen units awarded to them that are not yet finished. In summary:

1 crew	< 10 units
2 crews	< 19 units
≥ 3 crews	< 28 units

A crew is defined as 1 supervisor and a minimum of two workers. A unit will be considered finished, for the purposes of this rule, when the final inspection by City staff has been made and all the work is considered complete by the City and the owner and there are no outstanding change orders. On the day the invitation is issued, the LHCP will determine whether or not a contractor is considered active for the purpose of that bid.

3. The contractor must not be late on any jobs. That is to say, if you have exceeded the time allowed in the contract to complete the work and do not have a contract extension approved by both the owner and the City, then you are “late” on that job.

4. The overall performance of the contractor is always taken into consideration. If a contractor repeatedly performs poorly on any of the following measures then the LHCP will, at its discretion, classify the contractor as inactive until it is decided that their performance has improved.
 - a. Lead safe work practices as required by OSHA.
 - b. Quality workmanship.
 - c. Homeowner satisfaction.
 - d. Performance of work in compliance with all contract requirements.

3. Completing the bid package, bid awards, and submittals

The bid package consists of an invitation to bid, a bid and proposal, and the scope of work. The scope of work includes the property sketch, lead in dust, and lead in soil results. A sample bid package can be found in appendix 3A.

The date and time the bid is due is listed on the invitation to bid. This is also the time that the bid will be opened. The bid package of the apparent low bidder will be evaluated by LHCP staff for completeness and all required submittals. The invitation to bid lists the submittals that are due at the time of submitting the bid and those that are due within 7 days of the bid award.

Bidders are notified by fax of the bid results.

4. Contract, Notice to Proceed, and Relocation

Contract

The LHCP provides funding to private property owners to have the lead hazards identified at their property remediated. Along with the funds, the LHCP writes the scope of work, conducts the bidding process for the homeowner, and provides technical assistance to the homeowner during construction. The homeowner contracts with the successful bidder to perform the scope of work. The contractor will not have a contract with the City. The homeowner is your customer and the City's customer. A copy of the contract between the contractor and the homeowner is included as appendix 4A.

The contractor will be notified that the contracts are at the front desk ready for signature. The LHCP staff will acquire the owner's signature. A copy of the fully executed contract, signed by all parties, will be left at the front desk for pickup by the contractor. This will include the pay request form and lien waiver form.

Notice to Proceed and Relocation

A Conditional Notice To Proceed is issued to the contractor once all parties have signed the contract. The contractor is authorized to proceed according to the following conditions:

1. If relocation is **not** required, the contractor must submit a written request for a work start date to the City of Phoenix at least 5 working days before the proposed work start date.

2. If relocation is required, the contractor must submit a written request for a work start date to the City of Phoenix at least 10 working days before the proposed work start date.

An example of the “Request To Begin Lead Remediation” form is in appendix 4B and an example of the NTP form is in appendix 4C.

A work start date will not be set, under either of the two scenarios above, until all new materials required for completing the work are in the contractor's possession. This is to ensure that there are not long periods from the work start date to the work completion date when no work is being conducted due to delays in receiving ordered materials. Relocation is discussed in further detail under section 6, “Punch List Inspections and Clearance Testing”.

5. Work practices

All lead remediation work must be conducted in compliance with the OSHA Construction Industry Lead Standard (29 CFR 1926) and the project specifications. In general, all work practices should conform with those described in the HUD Guidelines For The Evaluation And Control of Lead-based Paint Hazards (June 1995).

In order to ensure that all contractors are complying with these standards, the LHCP will be monitoring the work sites. The following steps will be taken progressively with each cited violation of safe work practices, for the same issue or type of issue, as required by OSHA, HUD, or the LHCP according to the specifications in the contract.

1. A verbal reprimand on site at the time the problem is identified. Work may be stopped until the problem is fixed.
2. A verbal (same as above) and a written letter from our Construction Monitor requiring a written response.
3. A verbal, a letter from the Project Administrator requiring a written response, and classified as inactive from bid list for one month.
4. Same as #3 and in addition it would include a meeting and classification as inactive from bid list for three months.
5. Same as #4 and a 6 month suspension from bidding.
6. Exclusion for the rest of the grant period.

These steps would progress for repeated problems with the same issue or type of issue. A problem with improper containment one week and not wet scraping the next week would result in two verbal only responses (step 1). A problem with not wearing shoe covers one week and not wearing gloves the next week would result in a step 1 the first week and a step 2 the second week because they are the same type of problem, protective clothing. These violations will be documented with written notes and pictures where necessary.

If a contractor completes 10 properties in succession with no further problems of the type cited then the slate is wiped clean for that type and they would start at step 1 again for the next cited violation of that type. This provision is being adopted because it is the "bad apple", the contractor who seems to refuse to do things right, that we are gearing this to as far as excluding people from participating.

The following is a listing of OSHA requirements that we expect to see complied with on the job site:

1. *Respiratory Protection.* All workers should be wearing the appropriate respiratory protection equipment as required by OSHA.
2. *Protective Clothing.* All workers should be wearing the appropriate protective clothing as required by OSHA and the LHCP.
Examples:
 - a. Shoe covers should be worn in the work area at all times until the area passes clearance.
 - b. Protective suits, including gloves, must be worn whenever lead paint is being disturbed.
3. *Removing Protective Clothing.* Workers cannot exit the work area while still wearing protective clothing. Removed protective clothing must remain inside the work area (on plastic) and disposed of in plastic bags.
4. *Housekeeping.* Daily cleaning of the work areas is required to maintain them as free as practicable of accumulations of lead dust and debris.
5. *Hand Washing Facilities.* An operating hand washing facility is always required on the job site. The facility must be located just outside the containment area. Hand washing facilities must be approved by the LHCP. A pressure sprayer is not considered an acceptable hand washing facility. All water used for cleaning or hand washing must be passed through a 5 micron filter before it is released.
6. *Signs and Labeling.* All work areas and containers must have the appropriate signs and labels as required by OSHA. Barrier tape must be used to designate exterior work areas and the tape should be kept in place until the area is determined to be safe for reentry. When the family has not been relocated, barrier tape must be used for interior rooms that are awaiting clearance results.

The following is a listing of work practices required by the LHCP as described in the HUD Guidelines (1995) or in the specifications:

1. *Worksite Preparation.* Worksite preparation must be carried out as called for in the specification and described in the HUD Guidelines (1995). Here are some examples of what must be done:
 - a. Poly must be put down in all pathways to and from work areas.
 - b. Poly must be properly secured to the floor/ground.
 - c. Poly must be properly secured to all walls such that paint chips and dust do not fall between the poly and the wall onto a surface not covered with poly.
 - d. There must be adequate poly laid down to prevent any paint chips or dust generated from falling outside the poly.
2. *Wet Methods.* Lead painted surfaces must be kept wet (moist) while they are being scraped or manually sanded.

3. *Non- Certified Personnel.* A worker who is not lead certified may enter the work area only when all activities that involve disturbing lead paint are completed and an initial TSP-HEPA-TSP cleaning has been conducted (tsp or other lead specific detergent). The worker must wear disposable shoe covers while in the work area. This is usually done when, for example, windows have been removed and a non-lead-certified carpenter is on site to install the new windows when the installation will not involve disturbing a lead painted surface.
4. *Cleaning Procedures.* All cleaning should be conducted using HEPA vacuums and appropriate household detergents.
5. *Handling Waste.* All waste should be handled as described in the LHCP Contractor Handbook, section 7, "Lead Abatement Waste".

6. Punch list inspections and Clearance testing

Punch List Process

The following steps outline the punch list process when paint stabilization or total paint removal (stripping) has been called for:

- Step 1: Construction Monitor (or other LHCP staff) will inspect the surface preparation to ensure that it has been completed satisfactorily and according to the specification. The contractor must have this done before the primer coat has been applied. Contractor must have the unopened cans for the primer on site at this time to be checked to determine if it is of a level of quality equal to what is called for in the specification.
- Step 2: Contractor contacts Construction Monitor to inspect application of primer coat. Contractor must have the unopened paint cans for the topcoat on site at this time to be checked to determine if it is of a level of quality equal to what is called for in the specification.
- Step 3: Construction Monitor will inspect the dried topcoat for the final inspection to ensure the application meets the standard set out in the specification.

Clearance Testing

The following steps outline the clearance testing process:

- Step 1: Contractor provides testing firm with a 24-hour notice of when testing is likely to occur.
- Step 2: Contractor contacts Construction Monitor (or other LHCP staff) to make a final punch list inspection. Construction Monitor determines if all work that needs to be done before the final cleaning (for that stage) has been satisfactorily completed. If so, then the Construction Monitor notifies testing company that they may conduct the clearance testing.
- Step 3: Contractor performs final cleaning and arranges for testing firm to conduct clearance test.

When the testing firm arrives they will notify the contractor (the person on site) if an area has visible amounts of dust, debris or residue. If it does, then the inspector will not be able to take the dust wipe and the contractor will have to clean these areas again. If the amount of time to clean these areas results in the testing firm having to leave and then come back at a later time, this will result in a \$75 fee charged to the contractor (to be taken out of the final payment). The \$75 fee will also be charged if the inspector arrives on site as requested, but is told that the site is not yet ready for testing.

The cost of retests that must be taken due to the failure of the initial test will be deducted from the contractor's final payment.

Where Wipes Are Taken

Rule #1: The contractor is responsible for cleaning 100% of all horizontal surfaces in all work areas, adjacent areas, and pathways to below HUD/EPA clearance levels. This includes corners, closets, windowsills, and the tops of baseboards and other trim.

What is an adjacent area? It is an area outside the work area and within 5 feet of the containment. What is a pathway? It is the route you take from the entryway to the work area(s) and between work area(s).

A dust wipe is a representative sample of an area. A clearance wipe is supposed to demonstrate that the entire area has lead in dust levels below a particular standard. Dust wipes are taken in a spot that looks least likely to have been cleaned well. This is what is sometimes referred to as "worst case representative sampling". If the worst case spot passes clearance then the odds are good that the rest of the area has also passed.

Common Locations of Clearance Samples	
<i>INTERIOR</i>	
Work Areas	Wipe test on floor and windowsill or well (trough) for every work area.
Adjacent Areas and Pathways	Floor wipe next to work area (outside containment). Floor wipe on pathways to work area.
Door Only Containment	Floor wipe on both sides of containment (the other side is an adjacent area).
<i>EXTERIOR</i>	
Exterior dust samples	Porches, sidewalks, and driveways that are part of a work area or an adjacent area.
Soil samples	Any soil in a work area will be sampled for clearance.

Staging

Jobs are staged in order to prevent relocation, reduce the amount of time a family is relocated and/or to ensure the family has safe access to the property, i.e. they do not have to walk through a work area to get in and out of the property. In order for staging to accomplish these goals, the work must proceed as designed and work done in stage 1 must pass clearance before work can begin for stage 2. Some work items may be changed as to which stage they are performed in as long as the goals of the staging are met. The contractor should consult with LHCP staff about any proposed changes to the staging.

Relocation and Clearance Testing

How is a day defined? A day is defined as 6 am to 6 pm (normal working hours as specified in the contract). If you have committed to 5 days for how long a family will be relocated this means that you have from 6 am on Monday until 6 pm on Friday. If the family cannot return to the house by 6 pm on Friday then additional charges begin to accrue.

The contractor is responsible for maintaining the security of the property until they hand over the keys to the house to the homeowner. Leaving the keys at the front desk of the hotel does not constitute handing over the keys.

A copy of the relocation policy is located in appendix 6A. Hotel charges range from \$50 to \$120 per room per night depending on the hotel, time of year, and number of people per room.

Additional Charges

If the family is unable to return by 6 pm on the last day of relocation then an additional night at the hotel and a food charge for the next days breakfast and lunch will be arranged and charged to the contractor. At 6 pm on the next day, if the family is still not approved to return to the property, then another nights stay at the hotel, dinner for that day, and breakfast and lunch for the next day will be charged. This will continue until the family is approved to return to the property.

Notification of Results

LHCP staff will call the contractor to let them know what the results of the clearance testing are and where any additional tests need to be taken.

Lab Costs (Fiberquant)

- A. Analyzed during normal working hours (Mon - Fri, 8am-6pm) - \$20 per sample.
- B. Analyzed outside normal working hours - \$20 per sample plus a \$50.00 set up charge.

An average of 8 (+/- 4) samples per property will be taken for clearance. The range in cost is \$80 (4 samples during normal hours) to \$290 (12 samples outside normal hours) with an average of \$160 to \$210 (8 samples from normal to outside hours).

7. Lead Abatement Waste

Lead-based paint waste must be handled as follows:

- All paint chip debris should be double bagged for disposal.
- All lead painted components should be kept in a closed and locked container while on site.
- All lead-based paint debris (chips and components) must be disposed of in a municipal solid waste landfill.

8. Pay requests

All pay requests, change orders and required documentation are to be submitted to the Construction Monitor, who will make the final inspection at that time. The contractor is responsible for acquiring the owner's signature. Once it is determined that all work has been completed to the LHCP's and the owner's satisfaction, the Construction Monitor will submit the signed pay request to the Loan Processor. Once the pay request, signed by all parties, and all documentation has been received by the Loan Processor, payment will be made within 7 business days. A sample pay request and lien waiver is in appendix 8A.

The signed pay request must be submitted with the following:

- a. Signed lien waiver.
- b. Copies of any manufacturer warranties.
- c. Signed change orders, if any.

9. Appendices

2A: Application to become active bidder.

3A: Sample bid package.

4A: Owner-Contractor contract.

4B: Request to Begin Lead Remediation.

4C: Notice to proceed (NTP).

6A: Relocation policy.

8A: Pay request and lien waiver.