

Lead Based Paint Risk Assessment Report

For the Dwelling Located at:
104 Grand Avenue
East Alton, Illinois 62024

Occupied by:
Vacant

Year Built
1940

Prepared For:

By:

State License Number:

XRF Serial Number: XL309-U3237NR6952

Date: January 26, 2007
Reevaluation Due Date: January 2008

Summary

Individuals who have successfully received the H.U.D. approved lead safe work practice class should perform any hazards addressed on this property. A state licensed lead professional should do the lead removal. Refer to the Indiana State Law that may have additional requirements depending on scope of work.

A lead-based paint risk assessment was conducted on January 26, 2007 at 104 Grand Avenue in East Alton, Illinois, 62024 for _____ who may be reached at _____. This property was built in 1940. If the homeowner/landlord is different than occupants that reside in the residence or the individual that requested the Risk Assessment the information is located on the Initial Contact Interview Pages. _____ Certified Risk Assessor, License Number _____ conducted the risk assessment with several dust samples (*EPA Hazard Levels: Floor—40 micrograms per ft²/Window Sill—250 micrograms per ft²/Window Well—400 micrograms per ft²*), composite soil sampling, and a portable x-ray florescent environmental analyzer (XRF) XRF Serial Number: XL309-U3237NR6952. The XRF analyzer is a nondestructive method of testing paint and provides immediate results for each test conducted, and if paint contains lead equal to or greater than 1.0 mg/cm², it is considered to be lead-based paint. This sampling was taken to come to the following conclusions.

While the building and its paint are in relatively poor condition overall, the risk assessment showed that lead hazards exist in the following locations:

- There are lead dust levels around Rooms 3 & 5 Windows, and Room 8 Floors that exceed H.U.D. guidelines.*
- There are NO lead soil levels around the dripline of the house that exceed H.U.D. guidelines.*

LEAD BASED PAINT & HAZARDS SUMMARY

EXTERIOR:

HOUSE:

- **Exposed wood window wells and casings are in poor condition and positive.**

As lead-based paint hazards were identified, I recommend that you contact your local health department to have all children in the household under the age of 6 tested for lead poisoning. I also recommend that, as soon as possible, you clean the residence following the recommendations in the EPA brochure "Protect Your Family From Lead in Your Home" or on the Indiana State Department of Health attached sheets. Other recommendations for safe ways to minimize your child's exposure to lead-based paint are also found throughout the report.

There has not been any previous lead-based paint testing at this dwelling, although a lead-based paint inspection of all painted surfaces is always recommended so that potential lead problems can be monitored before they become hazardous. Soil lead levels were *below* interim control levels of 1200 micrograms/gram (bare soil areas to H.U.D. and EPA interim levels of 400 micrograms/gram for contact areas and 1200 micrograms/gram for areas children are not likely to contact) and *are not a hazard*.

All LBP hazards are considered equally severe and all hazards should be addressed in a timely fashion. Any level of lead exposure is considered hazardous.

The Risk Assessor has decided to recommend the following control measures, which are all acceptable based on H.U.D.'s 1995 Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing:

Interim Controls *Designed to temporarily reduce human exposure*

- x Specialized cleaning/wet washing using detergents that have phosphates added is preferred until the affected components are at minimum repaired.
- x Painting is required to close hazard on areas chipping and peeling.
- x Temporary containment while work is performed is required.
- x Ongoing monitoring of these areas will be required to minimize hazards and reduce human exposure.
- x Resident education should continue to all future owners and occupants.

Interim Control Measures Apply at Minimum to all Hazards Identified

- x Cover all work areas with 6 mil plastic to contain debris.
- x Complete prerequisite repairs to control moisture or substrate problems that contributed to the hazard.
- x Remove all loose surface contaminants wetting surface to minimize dust, use HEPA sander when possible.
- x Apply primer to affected surfaces.
- x Apply topcoat of paint and clean all work areas.
- x Typically low in cost.
- x Use workers with H.U.D. safe work practice training certificate or license.

Friction and Impact Reduction Treatments Works Well for Door Thresholds, Stair Treads, Floors, and Sometimes Window Components and Door Components if Not Replaced

- x Cover friction surfaces with abrasion resistant materials such as vinyl tread runners or aluminum trim enclosing door threshold.
- x Repair component to good working condition.
- x Protect impact surfaces with barriers or impact resistant materials. For example, cover window wells with aluminum work wells.
- x Less costly than component replacement in some cases.
- x Controls future dust generation through monitoring is still required.
- x May generate extensive dust during treatment so work with all surfaces wet when possible and plastic area off.

Dust Removal Applies to All Work Areas And Around Rooms 3 & 5 Windows, And Room 8 Floors

- x Extensive cleaning using HEPA vacuums and wet washing is recommended and required to pass clearance.
- x Use a wash bucket and a rinse bucket using disposable rags and be sure not to double dip the rags. Work horizontal surfaces from top to the floor. Work your way out of the room doing about a three-foot section at a time, once with the soap water and once with the rinse bucket. You must dispose of rags each time for a thorough cleaning.
- x Must control source of dust so sometimes ductwork will need to be cleaned and sometimes a room will need to be cleaned twice.
- x Takes place at the conclusion of interim control or abatement measures and before clearance sampling.
- x Designed to reduce occupant exposure and leave behind a clean environment.
- x Effective only if surfaces can be cleaned - the areas that components are not replaced occupant should dust frequently particularly around the older windows and doors.
- x When replacing windows, be sure to clean new wells/ troughs, sills, and floors once job is complete and each evening before shutting the job down.

x Concrete floors are sometimes better to paint after cleaning, surface is porous and lead dust is sometimes hard to remove.

x Hardwood floors are better to seal since they are porous and retain lead dust.

x Clearance sampling will be required.

Besides Floor and Windows, Residents Should Clean

x Horizontal surfaces (baseboards and shelves).

x Vinyl Mini-Blinds and the surrounding areas.

Replacement of Building Components Is The Best Option For Window Components and Exterior Door Components But is Not Always Cost Effective. Note: Sometimes It Is Less Expensive to Replace the Windows Rather Than Try To Repair the Existing Ones Let Your Contractor or Rehabilitation Specialist Determine This.

x Minimize dust contamination to people and property.

x Upgrades building, eliminate friction dust this adds value.

x New window components and door components don't require monitoring.

x Can be a problem in historic homes although it can be done - Expensive.

Permanent Enclosure Is A Good Option For Exterior Components but Before Covering Identify Area as "Lead Hazard" With Spray Paint or Brush

x Mechanically attaching a rigid, durable barrier to building components such as vinyl siding aluminum trim – this also works well in porch areas.

x This should provide a "dust-tight" system as long as areas are caulked, sealed, and monitored.

x Little waste is generated, workers should still spread 6 mil plastic around work area to contain debris.

x LBP is still present and must be monitored for moisture problems that may generate or siding or trim loosening.

x Enclosures are still vulnerable to water and physical damage.

Abatement Is An Option

x Can be very expensive.

x Uses licensed abatement contractors.

x Removes lead permanently.

x No monitoring required.

On-Site Removal :

x Mechanical removal.

x Chemical removal should be done by a licensed professional if this option is chosen.

x Cost may be more.

x May generate hazardous waste.

x May not be effective on certain substrates.

Off-site Removal :

x Appropriate for historic preservation.

x Hazard is removed.

x Can be expensive.

x May deteriorate glues from components.

Lead Hazard Control Practices Accepted by H.U.D.

- x Use wet methods or limited dry scraping and sanding. Mist surfaces before scraping and sanding. Continue to mist while working. Dry scraping or sanding of very small areas (for example, around light switches or outlets) may be done if flat surfaces below these areas are covered with protective sheeting. These methods should be avoided on areas larger than 10% of component, 2 square feet per room, or 20 square feet on exterior surfaces, and workers must have adequate respiratory protection.
- x Mist before drilling and cutting to reduce dust creation and keep dust from becoming airborne and spreading beyond the work area. Due to it being dangerous to use water with electrical tools consider the use of foam (such as shaving cream) when cutting or drilling to reduce dust generation.
- x Controlled sanding or grinding with HEPA vacuum attachment is acceptable. If the sanding or grinding machines are "shrouded," which means surrounded with a barrier that prevents dust from flying out around the perimeter, AND attached to a HEPA vacuum, they can be used. Because some dust may still blow out around the perimeter, workers near the machine should wear half-mask respirators rated by NIOSH as N100 (or HEPA) at a minimum. Also, the work area must be completely isolated if the machine is used inside. Because these tools can create high levels of dust and require additional precautions it is advisable to receive further training, if not already received, before using this method.
- x Chemical stripping not using methylene chloride paint strippers. Chemical strippers can be dangerous and should be used with great caution. Types of strippers range from citrus-based (safer) to more dangerous caustic strippers. Use of chemical strippers may trigger additional training, notification, and record keeping requirements under the OSHA Hazard Communication Standard. Follow the manufacturer's directions when using any chemical stripper.
- x The use a heat gun set below 1,100 degrees F may be used with caution. It is recommended for small areas only, such as the edge of a door, the top of a window stool, or the friction surface of a window jamb.
- x Scoring paint before separating components helps prevent paint from chipping when a paint seal is broken.
- x Prying and pulling apart components and pulling nails instead of pounding create less dust and fewer paint chips. Vise grips may be useful when pulling nails.
- x Removal of paint using contained pressure washing and/or contained abrasive blasting within a protective enclosure to prevent the spread of paint chips, dust, and debris may be done. This method requires additional precautions and should only be used by certified lead abatement workers.

Prohibited or Not-Recommended Lead Hazard Control Practices

- x Paint removal practices that are either prohibited or not recommended in the H.U.D. Guidelines for the evaluation and control of lead base paint hazards in housing: Settings in which interim controls are generally not appropriate. H.U.D. chose to ban or not recommend these methods because they create excessive lead dust and because alternative methods are available that are effective and less expensive.

Lead Hazard Control Practices Prohibited by H.U.D.

- x Open flame burning or torching. Open torches, infrared scorches, electric irons, and heat guns operating above 1,100 degrees F. all may cause the release of lead fumes, which can poison workers. The fallout from the volatilized lead can also be very difficult to clean up. Heat guns operating below 1,100 degrees F. are acceptable, although they are recommended only for small areas.
- x Machine sanding grinding without HEPA vacuum exhaust equipment. Circular, reciprocating, belt and palm sanding of leaded surfaces can generate a large amount of leaded dust. Sanders and grinders should not be used unless the release of dust is controlled by the use of HEPA vacuum exhaust equipment attached to the tools.
- x Abrasive blasting or sandblasting w/out HEPA exhaust equipment. Like sanders, abrasive blasters will release a large amount of leaded dust into the environment unless HEPA vacuum local exhaust equipment is used.
- x Uncontained hydro blasting or high-pressure washing. Power washing often leaves leaded paint chips and dust on soil and exterior pathways. Hydro blasting should not be used unless all runoff will be contained and filtered.

Lead Hazard Control Practices Not Recommended by H.U.D.

- x Dry scraping/sanding (except for limited areas). Extensive use of dry scraping or sanding generates a significant amount of leaded dust, which is hard to contain. Surfaces should be wetted prior to scraping/sanding so that the dispersal of dust is limited. Of course, some areas, such as surfaces near electrical circuits, should not be wetted.
- x Methylene chloride paint strippers. Methylene chloride can cause liver and kidney damage and carbon monoxide poisoning, and it is suspected to cause cancer. Air-purifying respirators with organic vapor cartridges do not provide adequate protection. (If respirators are required, they must be of the supplied-air or self-contained variety.) If chemical paint removers will be used, they should not contain methylene chloride and should preferably be used off-site.

Waste Management

- x All residential waste may go to a Class D landfill in the State of Indiana.

Worker Protection

- x Respirator with fit testing on request as required by the contractor.
- x Eye protection.
- x Clothing protection (tyvek suits).

Occupant Protection

- x Clean up, HEPA vacuum, wet wash daily before leaving job particularly by windows and other hazard areas.
- x Occupants vacate unit when the only bath, kitchen, or sleep area are affected on interim controls, and the work and clean up cannot be completed in eight hours shift.
- x Cover belongings with six mil plastic and seal with tape.
- x Always seal off work areas and cover work areas with 6 mil plastic and seal off ductwork during work, particularly HVAC returns.

Clearance Testing

- x Visual examination with no visible paint chips around interior or exterior of house.
- x Wipe sampling with no visible dust on clearance examination and dust levels must be below the acceptable levels set by EPA in order to pass clearance.
- x Soil testing applies to soils with lead levels above 5,000 p.p.m.

Priority Attention for Immediate Hazards

- x Dust levels exceed state & federal standards; *Rooms 3 & 5 Windows, and Room 8 Floors.*
- x Evidence of direct contact by children.
- x Hazards in play area.
- x Soil levels do not exceed H.U.D. guidelines.

WARNING: DUST SAMPLES WERE NOT TAKEN BY EVERY WINDOW OR IN EVERY ROOM. ALL AREAS NOT SAMPLED SHOULD BE ASSUMED TO CONTAIN LEAD DUST AND SHOULD BE DUSTED FREQUENTLY BY OCCUPANT.

Reevaluation: The normal reevaluation schedule for the interim control measures used in this property is twelve months. Because the *dust levels* exceed the H.U.D. Standards the dwelling should be reevaluated by **January 2008**, twelve months from today's date.

XRP Serial #XL309 - U32378R6952
 Starting #1004
 Ending #1039

LEAD RISK ASSESSMENT SITE DESCRIPTION

Site 104 Grand Avenue Date January 26, 2007 Assessor _____
East Alton, IL 62024

Area Diagrammed Floor Basement X Attic or Storage Area X Exterior only (show property boundary)

Standard Abbreviations for Use

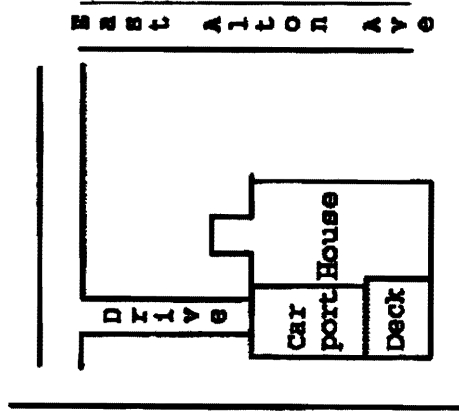
- BR Bedroom
- CBDR Children's Bedroom
- MBDR Master Bedroom
- BDR Bathroom
- DR Dining Room
- Gar Garage, Carport
- KT Kitchen
- LR Living Room, Den, Family Room
- Mch Mechanical (Furnace, Water Heater)
- PA Play Area
- St Storage Area (Closet, Pantry, Shed)
- UB Utility (Laundry Room, Workroom)

Legend:

- x-soil sample sites
- f-Floor; Dust wipes
- w-Window Sill; Dust wipes
- w-Window Wall; Dust wipes
- d-Dust Work; Dust wipes

Site Notes:

--House; Exposed wood window wells and casings are in poor condition and positive.



Grand

LEAD RISK ASSESSMENT SITE DESCRIPTION

104 Grand Avenue
 Site: East Alton, IL 62024 Date: January 26, 2007 Assessor: _____

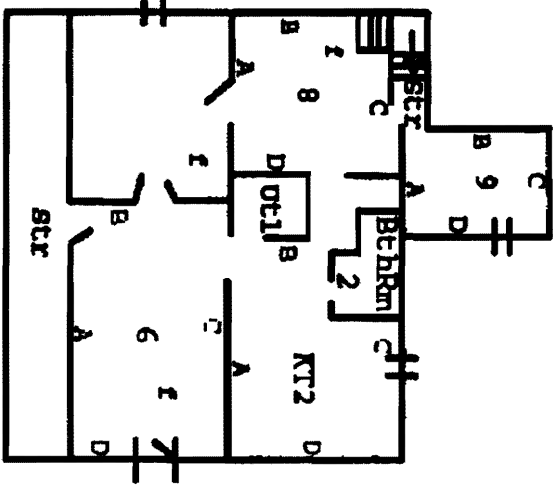
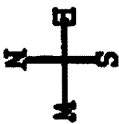
Area Diagrammed: _____ Floor: X Basement: _____ Attic or Storage Area: _____ Exterior only (show property boundary)

Standard Abbreviations for Use

- BR: Bedroom
- CBDR: Child's Bedroom
- MBDR: Master Bedroom
- BR: Bedroom
- DR: Dining Room
- GR: Garage, Carport
- KT: Kitchen
- LR: Living Room, Den, Family Room
- Mch: Mechanical (Furnace, Water Heater)
- PA: Play Area
- Str: Storage Area (Closet, Party Shed)
- UH: Utility (Laundry Room, Workroom)

- Legend:
- x=toil: Sample sites
 - f=Floor: Dust wipes
 - w=window sill: Dust wipes
 - w=window wall: Dust wipes
 - d=Duct work: Dust wipes

Site Notes:



Grand

LEAD RISK ASSESSMENT SITE DESCRIPTION

104 Grand Avenue
 Site East Alton, IL 62024 Date January 26, 2007 Assessor

Area Diagrammed 1st Floor Basement Attic or Storage Area Exterior only (show property boundary)

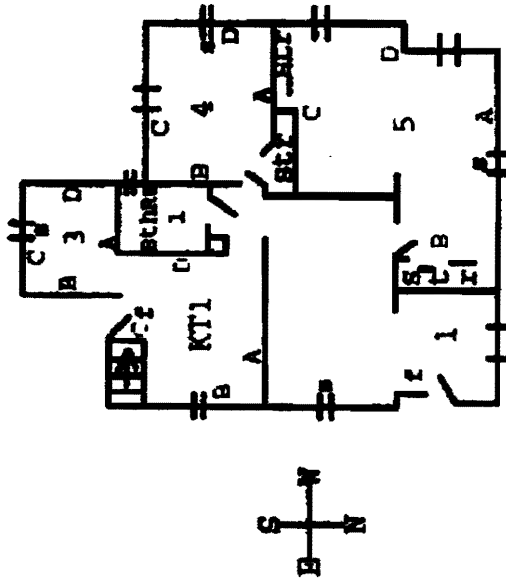
Standard Abbreviations for Use

- BdR Bedroom
- CBdR Children's Bedroom
- MBdR Master Bedroom
- BdRr Bedroom
- DR Dining Room
- Gar Garage, Carport
- Kr Kitchen
- LR Living Room, Den, Family Room
- Mch Mechanical (Furnace, Water Heater)
- PA Play Area
- St Storage Area (Closet, Pantry Shed)
- UL Utility (Laundry Room, Workroom)

Legend:

- x-Poll Sample sites
- f-Floor; Dust wipes
- w-Window sill; Dust wipes
- e-Window Well; Dust wipes
- d-Dust Work; Dust wipes

Site Notes:



Grand

Attr:

Customer ID:
Customer PO:
Received: 01/29/07 4:08 PM
Order:
Inq:
Report Date: 1/31/2007

Lead in Wipes by Flame AAS (SW 846 3050B and 7420*)

Lab ID	Analyzed	Area Sampled	MDL	Lead Concentration	Notes
0001	1/30/2007	144 in ²	10.0	<10.0 µg/ft ²	ROOM 1 Collected: 1/29/2007
Client Sample 1854					
0002	1/30/2007	144 in ²	10.0	10.0 µg/ft ²	ROOM 6 Collected: 1/29/2007
Client Sample 1869					
0003	1/30/2007	144 in ²	10.0	<10.0 µg/ft ²	ROOM 7 Collected: 1/29/2007
Client Sample 1886					
0004	1/30/2007	144 in ²	10.0	45.0 µg/ft ²	ROOM 8 Collected: 1/29/2007
Client Sample 1867					
0005	1/30/2007	144 in ²	10.0	11.0 µg/ft ²	KITCHEN 1 Collected: 1/29/2007
Client Sample 1858					
0006	1/30/2007	144 in ²	10.0	<10.0 µg/ft ²	APRIL Collected: 1/29/2007
Client Sample 1850					
0007	1/30/2007	36 in ²	40.0	46.0 µg/ft ²	ROOM 2 BELL Collected: 1/29/2007
Client Sample 1890					
0008	1/30/2007	36 in ²	40.0	390.0 µg/ft ²	ROOM 3 BELL Collected: 1/29/2007
Client Sample 1881					
0009	1/30/2007	36 in ²	40.0	81.0 µg/ft ²	ROOM 4 BELL Collected: 1/29/2007
Client Sample 1882					
0010	1/30/2007	36 in ²	40.0	880.0 µg/ft ²	ROOM 5 BELL Collected: 1/29/2007
Client Sample 1883					

or other approved signatory

Reporting limit is 10 µg/ft². The CC data coincides with these sample results indicated in this report that the method quality control requirements, unless specifically instructed otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied. Samples received in good condition unless otherwise noted. Quality Control Data associated with this structure set is within acceptable limits, unless otherwise noted.

ACCREDITED TO: ANSI International Lead Laboratory Approval Program 01/2005

Date Printed: 1/31/2007 7:46:36 AM

Customer ID:
Customer PO:
Received: 01/29/07 4:09 PM
Order: 180701188

Report Date: 1/31/2007

Lead in Soils by Flame AAS (SW 846 3050B and 7420*)

Lab ID:	Analyst	RDL	Lead Concentration	Note
0011	1/30/2007	40	230 mg/Kg	HOUSE DRUPLINE
Client Sample: 1884				Collected: 1/29/2007

or other approved signatory

Reporting limit is 40 mg/kg. The RDL does not apply to these sample results because in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples returned and may not be representative, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection services.

* slight modifications to methods applied. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted.

ACCREDITATIONS: ASMA Environmental Lead Laboratory Approval Program 09/07/06

Date Printed: 1/31/2007 7:45:08 AM