Report for Specific Scope Renovation, Repair and Paint Lead-Based Paint Survey (RRP Survey)

Job # 2013-6-3 1971 River Road Survey Date: June 3, 2013 Property Address: 1971 River Road Jacksonville, Florida 32207 Home Built 1930



Prepared for:	Prepared By:
Home Owner	Lead Paint Solutions, LLC
	Certification # FL-48641-1
	4460 Hodges Blvd. unit 516
	Jacksonville, FL 32224
	(904) 220-5323
Property Owner:	Surveyed by:
Seller	Lead Risk Assessor
	Bill Wilson
	EPA Certification # FL-R-72967-1
	Expiration Date: August 31, 2013

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General Information

A RRP Survey is a limited scope lead-based paint (LBP) investigation to identify the presence of LBP in specific building components of the home that are pending renovation. It is not the intent of this report to provide a Full Home Lead-Based Paint Inspection or Risk Assessment. It is the intent of this survey to provide enough information for the contractor to determine if the specific building components that are subject to renovation and paint disturbance contain LBP and subsequently require lead safe construction practices. Please note that this survey includes only the specific building components that Lead Paint Solutions (LPS) was directed to test and which are specifically addressed in this report. Any testing results reported in this Specific Scope Renovation, Repair and Paint Survey should not be used to make assumptions as to the lead level in coated surfaces on other non-tested building components.

EPA defines lead-based paint as paint or other surface coatings that contain lead equal to or in excess of 1.0 milligrams per square centimeter or more than 0.5 percent by weight. This report uses the EPA definition of 1.0 mg/cm2 as the actionable level of lead in paint.

Some painted surfaces may contain levels of lead below 1.0 mg/cm², which could create lead dust or lead-contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding. Levels of lead-based paint below 1.0 mg/cm² are also a concern for employees working under the jurisdiction and authority of the OSHA standards, 29 CFR 1926.62.

Often times painted surfaces were encapsulated by previous renovations and are exposed during subsequent renovations. Additional testing is recommended if, during renovation operations, enclosed painted surfaces are exposed.

A copy of this report must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

This report is valid for the day tested and due to the nature of changing or deteriorating conditions, no representation can be made beyond the date of survey.

The data in this report represents the entire scope of services for this survey. Conclusions drawn or opinions formed by others from this data are their own, and shall in no way obligate Lead Paint Solutions or their representatives.

The tests were performed using a RMD LPA-1 Spectrum Analyzer. The data collected is in the section titled XRF Results. Wall "A" in each room is the wall where the front entrance door opening is located (or aligned with street). Going clockwise and facing Wall "A", Wall "B" will always be to your right, Wall "C" directly to the rear and Wall "D" to the left. Doors, windows and closets are designated as left, center or right depending on their location on the wall. The calibration of the RMD LPA-1 is done in accordance with the Performance Characteristic Sheet (PCS) for this instrument. These XRF instruments are calibrated using the calibration standard block of known 1.0 mg/cm² lead content. Three calibration readings are taken before and after each dwelling is tested to

insure manufacturer's standards are met. If for any reason the instrument is not maintaining a consistent calibration reading within the manufacturer's standards for performance on the calibration block supplied by the manufacturer, manufacturer's recommendations are used to bring the instrument into calibration. If the instrument cannot be brought back into calibration it is taken off the site and sent back to the manufacturer for repair and/or re-calibration.

Summary

In anticipation of renovation that will disturb painted building components on the referenced dwelling, lead-based paint test were conducted on the dwelling's building components that are being disturbed, as directed by xxxxxxxxxx. The results of this survey indicates the presence of lead-based paint in levels equal to or greater than 1.0 mg/cm² on building components in this dwelling.

Lead based paint was located on the original fascia and window framing. See the attached XRF readings and photographs for specific details and locations of lead based paint.

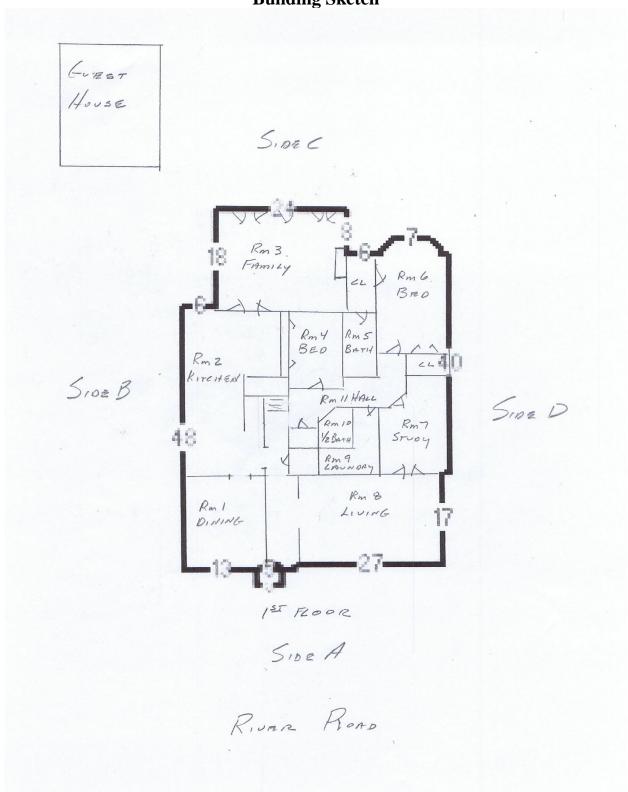
Also as requested, dust samples were taken in rooms 4, 6, and 7 and no lead dust higher than allowable by the EPA was located.

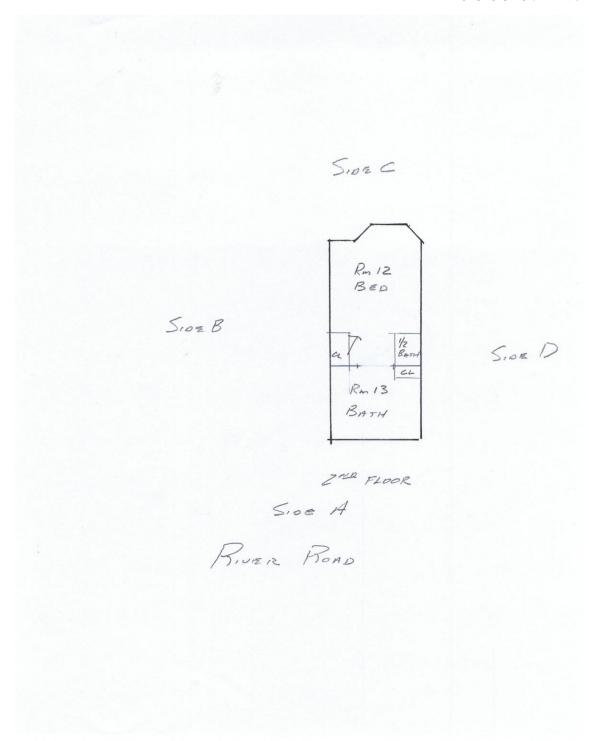
It is essential that all portions of this report be read and carefully considered, rather than limiting conclusions to the summary. Conclusions drawn or opinions formed by others from this data are their own, and shall in no way obligate Lead Paint Solutions or their representatives.

Building Information

Building 1 Site A 1971 RIVER RD Jacksonville FL)			Element	Code	Detail
Jacksonville FL	3220/			Exterior Wall	20	20 Face Brick
Building	Type [©]	0108 - SFR	CLASS 2	Exterior Wall	17	17 C.B. Stucco
Yea	r Built O			Roofing Structure	3	3 Gable or Hip
Building	Value O	\$686,447.00		Roofing Cover	6	6 CemFiberShingle
				Interior Wall	3	3 Plastered
Type 0	Gross	Heated	Effective	Int Flooring	19	19 Marble
	Area O	Area ®	Area [©]	Int Flooring	14	14 Carpet
Base Area		2896	2896	Heating Fuel	4	4 Electric
Patio		0	1	Heating Type	4	4 Forced-Ducted
Finished Open Porch	4	0	1	Air Conditioning	3	3 Central
Finished upper story 1		1368	1300	Element [©]	Code	
Finished	202	0	115	Stories		
Open Porch		·	113	Bedrooms	4.000	
Finished Storage	80	0	40	Baths Rooms / Units		
Base Area	354	354	354	TOOTIS / OTIG	21000	
Balcony	720	0	108			
Balcony	192	0	29			
Total		4618	4844			

Building Sketch





XRF Results

SEQUENTIAL REPORT OF LEAD PAINT SURVEY FOR:

Survey Date: 06/03/13
Report Date: 6/3/2013
Abatement Level: 1.0
Report No. 06/03/13 14:20
Total Readings: 119
Job Started: 06/03/13 14:20
Job Finished: 06/03/13 15:48

Read		Room					Paint		Paint	Lead	
No.	Rm	Name	Wall	Structure	Location	Member	Conc	d Substrate	Color	(mg/cm ²)	Mode
1		CALIBRATION								0.8	TC
2		CALIBRATION								0.8	TC
3		CALIBRATION								0.8	TC
4	001	dining room	ı A	Wall	Ctr		I	plaster	beige	-0.1	QM
5	001	dining room	ιВ	Wall	Ctr		I	plaster	beige	-0.2	QM
6	001	dining room	ı C	Wall	Ctr		I	plaster	beige	0.4	QM
7	001	dining room	ı D	Wall	Ctr		I	plaster	beige	0.0	QM
8	001	dining room	ı D	Ceiling	Ctr		I	drywall	white	-0.1	QM
9	001	dining room	ı D	Baseboard	Ctr			wood	white	0.1	QM
10	001	dining room	в В	Window	Ctr	Sill	I	wood	white	-0.2	QM
11		dining room		Cased open	Ctr		I	wood	white	-0.1	OM
12		dining room		Ceiling	Ctr		I	plaster	beige	-0.2	QM
13		kitchen	A	Wall	Ctr			drywall	beige	0.0	QM
14		kitchen	В	Wall	Ctr			drywall	beige	0.0	QM
15		kitchen	C	Wall	Ctr			drywall	beige	-0.2	QM
16		kitchen	D	Wall	Ctr			drywall	beige	-0.1	OM
17		kitchen	D	Ceiling	Ctr			drywall	white	-0.6	OM
18		kitchen	D	Baseboard	Ctr			wood	white	0.0	QM
19		kitchen	В	Window		Rgt casin		wood	white	-0.2	QM
20		kitchen	C	Door		Header	-	wood	beige	-0.3	QM
21		family room	-	Wall	Ctr	neader		wood	beige	0.1	QM
22		family room		Wall	Ctr			wood	beige	0.0	QM
23		family room		Wall	Ctr			wood	beige	0.0	QM
24		family room		Wall	Ctr			wood	beige	-0.2	QM
25		family room		Ceiling	Ctr			drywall	beige	-0.2	QM
26		family room		Crown mldg	Ctr			wood	beige	-0.4	OM
27		family room		Baseboard	Ctr			wood	beige	0.1	OM
28		family room		Door		Dat ismb		wood	beige	-0.2	OM
29		family room		Mantle	Ctr	Rgt jamb		wood	beige	-0.2	QM
30		bedroom	A	Wall	Ctr		I		blue	0.0	QM
31		bedroom	В	Wall	Ctr			drywall	blue	-0.4	OM
32			С					drywall		-0.4	~
33		bedroom bedroom	D	Wall Wall	Ctr			drywall	blue	-0.2	MQ
33			D D		Ctr			drywall	blue		MQ
34 35		bedroom	D D	Ceiling	Ctr			drywall	white	-0.1 -0.2	QM
35 36		bedroom	_	Baseboard	Ctr	T f +		wood	white		QM
36 37		bedroom	D	Door		Lft jamb		wood	white	-0.2	MQ
		bathroom	A	Wall	Ctr		I	4	white	-0.2	MQ
38		bathroom	В	Wall	Ctr			drywall	white	-0.2	MQ
39		bathroom	С	Wall	Ctr			drywall	white	-0.2	MQ
40		bathroom	D	Wall	Ctr			drywall	white	-0.2	MQ
41		bathroom	D	Ceiling	Ctr	J		drywall	white	-0.2	QM
42		bathroom	A	Door	Ctr	uoor		wood	white	-0.1	QM
43		bedroom	A	Wall	Ctr			drywall	yellow		QM
44		bedroom	В	Wall	Ctr			drywall	yellow		QM
45	006	bedroom	С	Wall	Ctr		Ι	drywall	yellow	-0.1	МQ

46	006 bedroom	D	Wall	Ctr	I drywall	yellow	-0.2	QM
47	006 bedroom	D	Ceiling	Ctr	I drywall	white	-0.1	QM
48	006 bedroom	D	Baseboard	Ctr	I drywall	white	-0.2	QM
49	006 bedroom	D	Window	Ctr Sill	I wood	white	-0.2	QM
50	006 bedroom	Α	Door	Ctr Rgt jamb	I wood	white	-0.1	QM
51	006 bedroom	С	Shelves	Ctr	I wood	white	-0.4	QM
52	007 study	А	Wall	Ctr	I drywall	yellow	0.1	QM
53	007 study	В	Wall	Ctr	I drywall	yellow	-0.2	QM
54	007 study	С	Wall	Ctr	I drywall	yellow	-0.1	QM
55	007 study	D	Wall	Ctr	I drywall	yellow	0.0	QM
56	007 study	D	Ceiling	Ctr	I drywall	white	0.0	QM
57	007 study	D	Baseboard	Ctr	I wood	white	-0.2	QM
58	→			Ctr	I wood	white	0.0	
50 59	<u> </u>	D	Crown mldg				-0.2	MQ
	007 study	D	Window	Ctr left jamb	I wood	white		QM
60	007 study	В	Door	Ctr Header	I wood	white	-0.3	QM
61	008 living room	A	Wall	Ctr	I plaster	beige	0.3	QM
62	008 living room	В	Wall	Ctr	I plaster	beige	0.5	QM
63	008 living room	С	Wall	Ctr	I plaster	beige	0.6	QM
64	008 living room	D	Wall	Ctr	I plaster	beige	0.5	QM
65	008 living room	D	Baseboard	Ctr	I wood	white	-0.2	QM
66	008 living room	D	Window	Ctr Sill	I wood	white	0.0	QM
67	008 living room	С	Door	Ctr Rgt casing	I wood	white	-0.1	QM
68	008 living room	С	Ceiling	Ctr	I plaster	beige	0.5	QM
69	009 laundry	Α	Wall	Ctr	I drywall	white	0.0	QM
70	009 laundry	В	Wall	Ctr	I drywall	white	-0.1	QM
71	009 laundry	C	Wall	Ctr	I drywall	white	-0.2	QM
72	009 laundry	D	Wall	Ctr	I drywall	white	-0.2	QM
73	009 laundry	D	Ceiling	Ctr	I drywall	white	0.1	QM
74	009 laundry	D	Baseboard	Ctr	I wood	white	-0.2	QM
75	-	С	Door		I wood	white	-0.2	
	009 laundry			Ctr Header				QM
76	010 bathroom	A	Wall	Ctr	I drywall	beige	0.0	QM
77	010 bathroom	В	Wall	Ctr	I drywall	beige	-0.2	QM
78	010 bathroom	С	Wall	Ctr	I drywall	beige	0.1	QM
79	010 bathroom	С	Ceiling	Ctr	I drywall	white	-0.1	QM
80	010 bathroom	С	Baseboard	Ctr	I wood	white	-0.1	QM
81	010 bathroom	С	Door	Ctr Rgt casing	I wood	white	0.0	QM
82	011 hall	А	Wall	Ctr	I drywall	beige	-0.1	QM
83	011 hall	В	Wall	Ctr	I drywall	beige	0.0	QM
84	011 hall	С	Wall	Ctr	I drywall	beige	-0.1	QM
85	011 hall	D	Wall	Ctr	I drywall	beige	0.1	QM
86	011 hall	D	Ceiling	Ctr	I drywall	white	-0.3	QM
87	011 hall	D	Baseboard	Ctr	I drywall	white	-0.1	QM
88	011 hall	Α	Door	Ctr Header	I wood	white	0.0	QM
89	012 bedroom	А	Wall	Ctr	I drywall	pink	-0.4	QM
90	012 bedroom	В	Wall	Ctr	I drywall	pink	-0.3	QM
91	012 bedroom	C	Wall	Ctr	I drywall	pink	-0.3	QM
92	012 bedroom	D	Wall	Ctr	I drywall	pink	-0.4	QM
93	012 bedroom	D	Baseboard	Ctr	I wood	white	-0.3	QM
94	012 bedroom	D	Ceiling	Ctr	I drywall	white	0.0	QM
95			-		-		-0.1	
	012 bedroom	D	Window	Ctr Rgt casing	I drywall	white		QM
96	012 bedroom	С	Door	Ctr door	I wood	white	-0.2	QM
97	013 bathroom	A	Wall	Ctr	I drywall	beige	-0.2	QM
98	013 bathroom	В	Wall	Ctr	I drywall	beige	-0.2	QM
99	013 bathroom	С	Wall	Ctr	I drywall	beige	-0.3	QM
100	013 bathroom	D	Wall	Ctr	I drywall	beige	-0.2	QM
101	013 bathroom	D	Ceiling	Ctr	I drywall	white	-0.3	QM
102	013 bathroom	С	Door	Ctr Lft jamb	I wood	white	-0.2	QM
103	001 exterior	Α	Fascia	Ctr	P wood	white	0.5	QM
104	001 exterior	В	Fascia	Ctr	P wood	white	8.7	QM
105	001 exterior	Α	Fascia	Ctr	P wood	white	8.1	QM
106	001 exterior	В	Window	Ctr Rgt casing	P wood	white	0.1	QM
107	001 exterior	Α	Window	Ctr Rgt casing	P wood	white	1.0	QM
108	001 exterior	A	Door	Ctr Rgt jamb	I wood	beige	0.1	QM
	-			J J		J -		~

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109	001 exterior	A	Door	Ctr Rgt jamb	I wood	black	0.0	QM
110	001 exterior	В	Door	Ctr Rgt jamb	I wood	white	0.1	QM
111	001 exterior	В	Window	Ctr Lft jamb	P wood	white	0.1	QM
112	001 exterior	В	Wall	Ctr	I concrete	beige	0.0	QM
113	001 exterior	С	Wall	Ctr	I concrete	beige	0.2	QM
114	001 exterior	D	Wall	Ctr	I concrete	beige	-0.1	QM
115	001 Guest Ho	A	Ceiling	Ctr	I wood	stained	d -0.2	QM
116	001 Guest Ho	A	Wall	Ctr	P wood	green	0.4	QM
117	CALIBRATIO	N					0.8	TC
118	CALIBRATIO	N					0.8	TC
119	CALIBRATIO	N					0.8	TC

---- End of Readings ----

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR:

Inspection Date: 06/03/13
Report Date: 6/7/2013
Abatement Level: 1.0
Report No. 06/03/13 14:20
Total Readings: 119 Actionable: 3
Job Started: 06/03/13 14:20
Job Finished: 06/03/13 15:48

Read	Wall	Structure	Location	Member	Paint Cond	Substrate	Paint Color	Lead (mg/cm²)	Mode
 Exte	rior R	oom 001							
105	A	Fascia	Ctr		P	wood	white	8.1	QM
107	A	Window	Ctr R	gt casing	P	wood	white	1.0	QM
104	В	Fascia	Ctr	_	P	wood	white	8.7	QM
			End of R	eadings					

Additional Photographs (if any)

Original wood contains lead based paint



Fascia contains deteriorated lead based paint and is a hazard.

Dust Samples Results

SCHNEIDER LABORATORIES GLOBAL

INCORPORATED

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • (FAX) 804-359-1475
Over 25 Years of Excellence in Service and Technology
AIHA/ELLAP 100527, ISO/IEC 17025, NVLAP 101150-0, NYELAP 11413, VELAP/NELAC 480135
LABORATORY ANALYSIS REPORT

Lead Analysis based on EPA 7000B Method Using Preparation Method EPA 3050B

ACCOUNT #: 4152-13-361

 CLIENT:
 Lead Paint Solutions
 DATE RECEIVED:
 6/11/2013

 ADDRESS:
 103 Century 21 Drive Ste 108
 DATE ANALYZED:
 6/11/2013

 Jacksonville, FL 32246
 DATE REPORTED:
 6/11/2013

PROJECT NAME: 2013-6-3

JOB LOCATION: 1971 River Road

PROJECT NO .:

PO NO.: Sample Type: WIPE

SLI Sample No.	Client Sample No.	Collection Date		Sample Description	Sample Area (ft²)	Total Lead (µg)	Lead Conc (µg/tt²)
31914430	S1	6/3/2013	3:00 PM	Rm 7 Study Floor	1.00	< 10.0	< 10.0
31914431	S2	6/3/2013	3:00 PM	Rm 6 Bed Floor	1.00	< 10.0	< 10.0
31914432	S3	6/3/2013	3:00 PM	Rm 4 Bed Floor	1.00	< 10.0	< 10.0
Analysis Ru	ın ID: 51844						

Analyst: Ryan Smlth

Total Number of Pages In Report: 1

Results relate only to samples as received by the laboratory.

Section Marclands

Viowed By Julie Martens, Data Management

Visit www.slabing.com for current certifications.

Final concentration calculations are based on client supplied information.

Minimum Reporting Limit: 10.0 µg. EPA Lead Hazard Std: 40 µg/ft²floors (please check lead wipe EPA HUD limit in your state) and 250 µg/ft²interior window sils, based on weighted avg of all samples taken. EPA Clearance Std: 40 µg/ft²floors, 250 µg/ft²interior window sils, 400 µg/ft²window troughs. MDLs and resulting reporting limits are based on ASTM E 1792 compliant media. "Data precision justifies 2 sig figures. All internal OC parameters were met. Unusual sample conditions, if any, are described.

Individual and Firm EPA Certifications

Lead Paint Activities Firm Lead Paint Solutions LLC EPA Certification FL-48641-1

antieu Si	ates Env	ironmenta	ıl Protection Agency
	This	s is to certif	y that
		MITED STA	TE.
	· ·	Lead Paint Solutions	LLC
	3		5
has fulfilled the requ	irements of the Toxic Substan	nces Control Act (TSCA) Sec int activities pursuant to 40 C	tion 402, and has received certification to conduct lead-
	In th	e Jurisdic	tion of:
		Florida	
This	certification is valid from the	date of issuance and expires	August 11, 2013
FL-48641-1			Organo, Mr.
Certification #	AUG - 3 2010	SMIED STATES	Jeaneanne M. Gettle, Chief
			Pesticides and Toxic Substances Branch

Lead Paint Risk Assessor William (Bill) R. Wilson EPA Certification # FL-R-72967-1



XRF Testing Protocol

Portable XRF lead-based paint analyzers are the most common primary analytical method for detecting lead-based paint because of their demonstrated abilities to determine if lead-based paint is present on many surfaces and to measure the paint without destructive sampling or paint removal, as well as their high speed and low cost per sample.

Portable XRF instruments expose a building component to X rays or gamma radiation, which causes lead to emit X rays with a characteristic frequency or energy. The intensity of this radiation is measured by the instrument. The inspector must then compare this displayed value (reading) with the inconclusive range or threshold specified in the XRF Performance Characteristic Sheet. Note: the RMD LPA-1 does not give inconclusive readings. All readings from the RMD LPA-1 XRF device are either positive or negative for lead-based paint. Because the thresholds shown in the Performance Characteristic Sheet (for Quick Mode) are based on 1.0 mg/cm², positive and negative readings are consistent with the HUD definition of lead-based paint for identification and disclosure purposes.

XRF Instrument Specifications

Instrument Manufacturer: Radiation Monitoring Devices, Inc. (RMD)

Model: LPA-1B

Serial Number: 3376

Modes of Operation: Time Corrected Mode for Calibrations

Quick Mode for Inspection

Radioactive Source: Cobalt 57

Age of Radioactive Source: Assayed March 13, 2013

Calibration Standard: NIST 1.04 mg/cm²

Services Provide by Lead Paint Solutions

Full Home Lead-Base Paint Inspection: A surface by surface investigation to identify the presence of lead-base paint (LBP) on both the interior and exterior of the home. Inside the home each room is checked; including 4 walls, ceilings, floor, base, doors and casing, windows and casing, stairs, and any other item with coated surfaces such as kitchen cabinets, vanities, wainscoting, crown and chair molding, and stairways. On the exterior of the home each painted surface is checked including walls, trim, fascia, soffit, downspouts, windows, and porches.

The goal is to identify all the LBP in and on the house. Typically it includes approximately 150 to 200 individual test locations. This is a good choice for the homeowner or contractor who is planning major home renovations that affect both the interior and exterior of the home. This inspection will allow enough information to complete the construction planning and design stages of a project, using expensive abatement and safe lead construction practices only where truly needed.

Often times this report is ordered by the homeowner and included in the construction bid documents they provide to a contractor for construction pricing. It is also ordered by realtors or prospective home buyers as part of the due diligence before purchasing a home.

Specific Scope Renovation Repair and Paint (RRP) Lead-Based Paint Survey: A limited LBP investigation to identify the presence of LBP in specific locations of the home that are pending renovation. This survey will allow enough information for the contractor to determine if the areas that are going to be disturbed contain LBP and subsequently require lead safe construction practices.

Clearance Testing: Clearance testing includes a visual examination and collection of dust samples; it is performed after construction cleanup is complete to determine if all LBP and dust has been removed.

Combination Lead Inspection and Risk Assessment Report: LBP in good condition does not necessarily create a health hazard. LBP in **deteriorating** condition is a health hazard. LBP deteriorates by aging, rubbing friction surfaces, impacts, and failing substrates all of which make lead-paint dust. The dust is a hazard to health. Most susceptible are children that play in the dust, getting it in their mouth and ingesting it. This report includes a Full Home LBP Inspection, an assessment of the condition of any lead-paint, identification of hazards, and advice on potential interim and permanent solutions.

This report is the most informative and is often used in older homes where there is a need to identify specific existing hazards and prescribe a solution. This report is often ordered by housing authorities where Federal funds are involved. It is also ordered by realtors or prospective home buyers as part of the due diligence before purchasing a home.

Third Party Verification and Consultant Services: The homeowner or the contractor may require ongoing project documentation or consulting in efforts to reduce hazards and to produce the best project possible. Additional assessments by an EPA certified Lead-based Paint risk assessor will further define the nature, severity, and location of Lead-Based Paint hazards. Additional assessments will lower project cost by providing the Contract/Owner with multiple options to focus on corrective measures regarding interim controls, permanent controls, and management/maintenance systems.

Training: We organize RRP (Renovation, Repair, and Painting) classes for the contractors who want to become EPA Lead Safe Renovators.

Glossary

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead contaminated dust, and removal of lead contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, monitoring. See also **Complete abatement** and **Interim controls**.

Accreditation: A formal recognition certifying that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.

Building component: Any element of a building that may be painted or have dust on its surface, e.g., walls, stair treads, floors, railings, doors, windowsills, etc.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for Contractors who have completed training and other requirements to safely allow them to undertake risk assessments, inspections, or abatement work. risk assessors, inspectors, and Abatement Contractors should be certified by the appropriate local, State, or Federal agency.

Chewable surface: See Chewed surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior windowsill.

Cleaning: The process of using a vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor, or, in some circumstances, a Sampling Technician, and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the leadcontaminated dust and debris created during abatement.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Disposal (of waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or liquid waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Environmental Intervention Blood-Lead Level (EIBL) child: A child who has a blood lead level at or above $20 \,\mu\text{g/dL}$ (micrograms of lead per deciliter of blood) in a single test or at 15-19 $\,\mu\text{g/dL}$ in two tests taken at least 3 months apart.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also **Enclosure**.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the Lead-based paint and the environment.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Reevaluation, and Abatement.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by Owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land use controls. See also **Monitoring**,

Interior windowsill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Latex: A waterborne emulsion paint made with synthetic binders, such as 100 percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than $1.0~\text{mg/cm}_2$ (milligrams of lead per square centimeter of surface) as measured by XRF or laboratory analysis, or 0.5~percent by weight ($5,000~\mu\text{g/g}$, 5,000~ppm (parts per million), or 5,000~mg/kg) as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, leadcontaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards include, for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-contaminated dust: Surface dust in residences that contain an area concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. EPA standards for leaded dust for risk assessments are 40 μ g/ft₂ (micrograms of lead per square foot) on floors and 250 μ g/ft₂ on interior windowsills. The EPA standards for clearance are 40 μ g/ft₂ on floors, 250 μ g/ft₂ on interior windowsills and 400 μ g/ft₂ on window troughs. The recommended standard for lead hazard screens for floors is 25 μ g/ft₂ and for windowsills is 125 μ g/ft₂.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The standard is $400 \, \mu \text{g/g}$ in play areas and $1200 \, \mu \text{g/g}$ in the rest of the yard.

Leaded dust: See Lead-contaminated dust.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for leadbased paint hazard control work. See also **Certified**.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Microgram (μg): 1/1,000,000 of a gram; used to measure weight.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating; (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed; and (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an Owner of a reversionary interest under a ground rent lease.

Paint inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and optionally (5) document successful compliance with lead-based paint hazard control requirements or standards.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100° F, and certain *contained* abrasive methods. Open-flame burning, open-abrasive blasting, sandblasting, extensive dry scraping, and stripping in a poorly ventilated space using a volatile stripper are prohibited paint removal methods. Hydroblasting is not recommended.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6 mil plastic sheeting or polyethylene bags (or doubled bags if using 4 mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent dust containment performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating (created by the reaction of polyols with a multifunctional isocyanate); often used to seal wood floors following lead-based paint hazard control work and cleaning.

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with leadbased paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Resident: A person who lives in a dwelling.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

RRP Survey: A limited scope lead-based paint (LBP) investigation to identify the presence of LBP in specific building components of the dwelling that are pending renovation. It is not the intent of the RRP Survey to provide a Full Home Lead-Based Paint Inspection or Risk Assessment. The intent of the RRP Survey to provide enough information for the contractor to determine if the specific building components that are subject to renovation and paint disturbance contain LBP. An RRP Survey includes only the specific building components that the contractor directed to test and are specifically contained in the report.

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.

Soil: See Bare soil.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also **XRF**

analyzer.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also **Mean**.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also **Composite sample**.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also **XRF analyzer**.

Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also **XRF analyzer**.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal.

Trough: See Window trough.

Windowsill: See Interior windowsill.

Window trough: For a typical double-hung window, the portion of the exterior windowsill between the interior windowsill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well."

Worker: An individual who has completed training in an accredited program to perform Lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of field portable XRF analyzers are used — direct readers and spectrum analyzers. For this lead-based paint inspection, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, that have a HUD Performance Characteristic Sheet, and are interpreted in accordance with the Performance Characteristic Sheet; it does not refer here to laboratory grade units or portable instruments designed to analyze soil.