

Lead-Based Paint Risk Assessment Report

For the Dwelling Located at:

Sandra Wickliffe
918-955-6928
5957 E. King Pl.
Tulsa, OK 74115
Year Built: 1953

Prepared For:

Cherokee Nation Housing Rehab
Using ODEQ, EPA and CN Work Practice Standards
Established in 40 CFR 745-227

Lab Analysis by
EMSL Analytical, INC.
3029 S. Jefferson
Saint Louis, MO 63118
Phone: (314) 577-0150 Fax: (314)776-3313

By:

Michael Miley, Certified Risk Assessor
Expiration: March 31, 2015
P.O. Box 948
Tahlequah, OK 74465
(918) 453-5009
Niton Model #: XLp300A 26524

OK Risk Assessor OKRASR13521
OK Firm OKFIRM11198
CN Firm CNFIRM00001
CN Risk Assessor CNRASR00030

Date: 9/10/14

Signature: 

Table of Contents

Summary

Part I: Identifying Information

Identity of dwelling(s) covered by report, identity of property(ies).

1. Risk Assessor, Name of Certificate (or License) and Number and State issuing certificate/license.
2. Property Owner Name, Address, and Phone Number.
3. Date of Report, Date of Environmental Sampling.

Part II: Completed Management, Maintenance, and Environmental Results Forms and Analyses

4. List of Location and Type of Identified Lead Hazards including and indication of which hazards are priorities (this summary should be suitable for use as notification to residents).
5. Optional Management Information (Form 5.6) (not required if all dwellings were sampled).
6. Maintenance/Paint Condition Information (Form 5.2 or 5.7)
7. Building Condition (Form 5.1)
8. Brief Narrative Description of Dwelling Selection Process (not required if all dwellings were sampled).
9. Analysis of Previous XRF Testing Report (if applicable).
10. Deteriorated Paint Sampling Results (Form 5.3 or 5.3a)
11. Dust Sampling Results (Form 5.4 or 5.4a)
12. Soil Sampling Results (Form 5.5)
13. Other Sampling Results (if applicable)

Part III: Lead Hazard Control Plan

14. Lead-Based Paint Policy Statement (not applicable for homeowners).
15. Name of individual in Charge of Lead-Based Paint Hazard Control Program.
16. Recommended Changes to Work Order System and Property Management (optional, not applicable for homeowners or property owner without work order systems).
17. Acceptable Interim Control Options For This Property and Estimated Costs.
18. Acceptable Abatement Options For This Property and Estimated Costs.
19. Reevaluation Schedule (if applicable).
20. Interim Control/Abatement to Be Implemented in This Property.
21. A Training Plan for Managers, Maintenance Supervisors, and Workers (this should include named individuals), if applicable.
22. Method of Resident Notification of Results of Risk Assessment and Lead Hazard Control Program (not applicable for homeowners). Note: This section should include a discussion of how residents are to be educated about lead poisoning, *before* the risk assessment results are released.
23. Signature (Risk Assessor) and Date.
24. All laboratory raw data.

Part IV: Appendix

Part 1: Identifying Information

For the Dwelling Located at:

Sandra Wickliffe
918-955-6928
5957 E. King Pl.
Tulsa, OK 74115
Year Built: 1953

Part II: Results

List of Location and Type of Identified Lead Hazards

Reading No	Units	Component	Substrate	Side	Condition	Color	Room	Results	PbC	PbC Error
58	mg / cm ^2	WALL	WOOD	A	FAIR	BEIGE	OUTSIDE	Positive	1.7	0.7
59	mg / cm ^2	CEILING	WOOD	UPPER	FAIR	BEIGE	OUTSIDE	Positive	1.2	0.2
62	mg / cm ^2	DOOR CASING	WOOD	A	FAIR	TAN	OUTSIDE	Positive	2	0.9
63	mg / cm ^2	SOFFIT	WOOD	A	POOR	TAN	OUTSIDE	Positive	1	0.3
66	mg / cm ^2	WALL	WOOD	B	FAIR	TAN	OUTSIDE	Positive	1.2	0.3
67	mg / cm ^2	WALL	WOOD	C	PEELING	TAN	OUTSIDE	Positive	1.4	0.4
72	mg / cm ^2	CORNERBOARD	WOOD	C	INTACT	WHITE	OUTSIDE	Positive	1.7	0.7
73	mg / cm ^2	WALL	WOOD	D	INTACT	TAN	OUTSIDE	Positive	1.4	0.4

A few other painted surfaces that have not been tested for lead are in "fair" condition and should be repainted within the next year before further deterioration occurs. However, these surfaces are not considered to be immediate "hazards," using criteria in the 1995 *HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*. Those surfaces are:

There has not been any previous lead-based paint testing at this dwelling, although a lead-based paint inspection of all painted surfaces is recommended so that potential lead problems can be monitored before they become hazardous. Soil lead levels were all below 400ug/g. Current EPA and HUD Guidance for soil is 400ug/g for bare play areas and 1,200 ug/g for other areas. Using these criteria, soil is not a hazard at this property. The owner has decided to select the following hazard control measures, which are all acceptable based on HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*:

Reevaluation: Standard Reevaluation Schedule 3 contained in the HUD Guidelines applies to this property, since one of the rooms had a dust lead level greater than the

standard. Therefore, the dwelling should be reevaluated in N/A (12 months from now). If no lead-based paint hazards are identified at this time, no further reevaluations are needed. However, since lead-based paint may be present in the dwelling, the owner should monitor the condition of all painted surfaces at least annually or whenever other information indicates a potential problem

Resident Questionnaire

Children/Children's Habits

1. (a) Do you have any children that live in your home? Yes _____ No X
 (b) If yes, how many? _____ Ages? _____
 (c) Record blood lead levels, if known _____
 IF NO CHILDREN, SKIP TO Q.5

2. Locate the rooms/areas where each child sleeps, eats, and plays.

Name of Child	Location of Bedroom	Location of All Rooms Where Child Eats	Primary Location Where Child Plays <u>Indoors</u>	Primary Location Where Child Plays <u>Outdoors</u>

3. Where are toys stored/kept? _____
 4. Is there any visible evidence of chewed or peeling paint on the wood work, furniture, or toys? Yes _____ No X

Family Use Patterns

5. Which entrances are used most frequently? A side entrance
 6. Which windows are opened most frequently? A Side
 7. Do you use window air conditioners? If yes, where?
(Condensation often causes paint deterioration)
 8. (a) Do any household member engage in gardening? Yes _____ No X
 (b) Record the location of any vegetable garden. _____
 (c) Are you planning any landscaping activities that will remove grass or ground covering? Yes _____ No X
 9. (a) How often is the household cleaned? Daily
 (b) What cleaning methods do you use? Soap and water
 10. (a) Did you recently complete any building renovations? Yes _____ No X
 (b) If yes, where? _____
 (c) Was building debris stored in the yard? If yes, where? _____
 11. Are you planning any building renovations? Where? _____ No X
 12. (a) Do any household members work in a lead-related industry? Yes _____ No X
 (b) If yes, where are dirty work clothes placed and cleaned? _____

Building Condition Form

CONDITION	YES	NO
Roof Missing Parts of Surfaces (tiles, boards, etc.)		X
Roof Has Holes or Large Cracks		X
Gutter or Downspouts Broken		X
Chimney Masonry cracked, bricks loose or missing, obviously out of plumb		X
Exterior or interior walls have obvious large cracks or holes, requiring more than routine painting		X
Exterior siding has missing boards or shingles		X
Water stains on interior walls or ceilings		X
Plaster walls deteriorated		X
Two or more windows or doors broken, missing, or boarded up		X
Porch or steps have major elements broken, missing, or boarded up		X
Foundation has major cracks, missing material, structural leans, or visibly unsound		X
Total		11

If the "Yes" column has 2 or more checks, the dwelling is considered to be in poor condition for the purposes of a risk assessment. However, specific conditions and extenuating circumstances should be considered before determining final condition of the building and the appropriateness of a lead hazard screen.

Notes:

Overall, the home is in "good" condition.

8. Dwelling Selection Process: N/A

9. Analysis of Previous XRF Testing Report: N/A

Field Sampling Form for Deteriorated Paint

Name of Risk Assessor Michael Miley
 Name of Property Owner Sandra Wickliffe
 Property Address 5957 E. King Pl. Tulsa, OK 74115
 Sampling Protocol Single-Family

Target Dwelling Criteria (Check All That Apply)

- Code Violations
 Judged to be in Poor Condition
 Presence of 2 or More Children between Ages of 6 Months and 6 Years
 Serves as Day-Care Facility
 Recently Prepared for Reoccupancy
 Random Sampling
 None of the above

XRF 8/28/2014

Please see summary report of lead paint inspection on next page

Reading No	Units	Component	Substrate	Side	Condition	Color	Room	Results	PbC	PbC Error
58	mg / cm ^2	WALL	WOOD	A	FAIR	BEIGE	OUTSIDE	Positive	1.7	0.7
59	mg / cm ^2	CEILING	WOOD	UPPER	FAIR	BEIGE	OUTSIDE	Positive	1.2	0.2
62	mg / cm ^2	DOOR CASING	WOOD	A	FAIR	TAN	OUTSIDE	Positive	2	0.9
63	mg / cm ^2	SOFFIT	WOOD	A	POOR	TAN	OUTSIDE	Positive	1	0.3
66	mg / cm ^2	WALL	WOOD	B	FAIR	TAN	OUTSIDE	Positive	1.2	0.3
67	mg / cm ^2	WALL	WOOD	C	PEELING	TAN	OUTSIDE	Positive	1.4	0.4
72	mg / cm ^2	CORNERBOARD	WOOD	C	INTACT	WHITE	OUTSIDE	Positive	1.7	0.7
73	mg / cm ^2	WALL	WOOD	D	INTACT	TAN	OUTSIDE	Positive	1.4	0.4

Sample all layer of paint, not just deteriorated paint layers

Total Number of Samples This Page 1

Page 1 of 1

Date of Sample Collection 8/28/2014 Date shipped to lab

**Field Sampling Form For Dust
(Single Surface)**

Sample Number	Room (Record Name of Room Used by the Owner or Resident)	Surface Type	Is Surface Smooth and Cleanable?	Dimension ¹ of Sample Area (inches x inches)	Area (In ²)	Result of Lab Analysis (ug/ft ²)

¹ Measure to the nearest 1/8 inch
Total Number of Samples This Page 0

Page 1 of 1

Date of Sample Collection 8/28/2014 Date shipped to lab N/A
Shipped by Michael Miley Received by EMSL
(signature) (signature)

HUD Standards: 40 ug/ft² (floors), 250 ug/ft² (interior window sills), 400 ug/ft² (window troughs)

Field Sampling Form For Soil

(Composite Sampling Only)

Name of Risk Assessor Michael Miley
Name of Property Owner Sandra Wickliffe
Property Address 5957 E. King Pl. Tulsa, OK 74115
Sampling Protocol Single-Family

SAMPLE NO.	LOCATION	BARE OR COVERED	LAB RESULTS mg/Kg
01	Dripline	Covered	410

Collect only the ½" of soil

Total Number of Samples This Page 1

Page 1 of 1

Date of Sample Collection 8/28/2014 Date shipped to lab 9/4/2014

Shipped by Michael Miley
(signature)

Received by EMSL
(signature)

13. Other Sampling Results: N/A

Part III: Lead Hazard Control Options

14. Lead-Based Paint Policy Statement

On File CNEP and Cherokee Nation Housing Rehab

15. Name of Individual in Charge of Lead-Based Paint Hazard Control Program:

Cherokee Nation Housing Rehab (George Hubbard)

16. Recommended Changes to Work Order System and Property Management

The existing work order system is an informal verbal one. If painted surfaces will be disturbed during a particular repair job, the painted surface should be tested to determine if it has lead-based paint on it. If it does (or if testing is not completed), the maintenance worker should take the necessary precautions by wetting down the surface and performing cleanup. If the surface area is large or if the work will generate a significant amount of dust, clearance testing should be completed before residents move back into the room. The table below can be used as a general guide in determining whether maintenance jobs are likely to be high risk or low risk.

When work is assigned, the owner or worker should determine whether or not the job is low or high risk and adopt protective measures as needed.

Table 17.1 (Taken from HUD Guidelines)
Summary of Low-and High-Risk Job Designations for Surfaces Known or Suspected to Have Lead-Based Paint

Job Description	Low Risk	High Risk
Repainting (includes surface Preparation)		√
Plastering or wall repair		√
Window repair		√
Water or moisture damage repair (repainting and plumbing)		√
Door repair	√	
Building component replacement		√
Welding on Painted Surfaces		√
Door lock repair or replacement	√	
Electrical fixture repair	√	
Floor refinishing		√
Carpet replacement		√
Groundskeeping	√	
Radiator leak repair	√	
Baluster repair (metal)		√
Demolition		√

High-risk jobs typically disturb more than 2 square feet per room. If these jobs disturb less than 2 square feet, then they can be considered low-risk jobs.

Table 17.2

	Low Risk	High Risk
Worksite preparation with plastic sheeting (6 mil thick)	Plastic sheet no less than 5 feet immediately underneath work area	Whole floor, plus simple airlock at door or tape door shut
Children kept out of work area	Yes	Yes
Resident relocation during work	No	Yes
Respirators	Probably not necessary*	Recommended
Protective clothing Note: Protective shoe coverings are not to be worn on ladders, scaffolds, etc.	Probably not necessary*	Recommended
Personal hygiene (enforced hand washing after job)	Required	Required
Showers	Probably not necessary	Recommended
Work practices	Use wet methods, except near electrical circuits	Use wet methods, except near electrical circuits
Cleaning	Wet cleaning with lead-specific detergent trisodium phosphate or other suitable detergent around the work area only (2 linear feet beyond plastic)	HEPA vacuum/wet wash/HEPA vacuum the entire work area
Clearance	Visual examination only	Dust sampling during the preliminary phase of the maintenance program and periodically thereafter (not required for every job)

- **Employers must have objective data showing that worker exposures are less than the OSHA Permissible Exposure Limit of 50ug/m³ if respirators and protective clothing will not be provided.**

17. Interim Control Options and Estimated Costs

The costs shown below include labor, materials, worker protection, site containment and cleanup. These are only very rough estimates that may not be accurate; a precise estimate should be obtained from a certified lead-based paint abatement contractor. I would be pleased to perform clearance testing after this work has been completed at your request.

Reading No	Component	Side	Room	Recommendations
58	WALL	A	OUTSIDE	Wet Scrape and Repaint
59	CEILING	UPPER	OUTSIDE	Wet Scrape and Repaint
62	DOOR CASING	A	OUTSIDE	Wet Scrape and Repaint
63	SOFFIT	A	OUTSIDE	Wet Scrape and Repaint
66	WALL	B	OUTSIDE	Wet Scrape and Repaint
67	WALL	C	OUTSIDE	Wet Scrape and Repaint
72	CORNERBOARD	C	OUTSIDE	Wet Scrape and Repaint
73	WALL	D	OUTSIDE	Wet Scrape and Repaint

18. Acceptable Abatement Options and Estimated Costs

Reading No	Component	Side	Room	Recommendations
58	WALL	A	OUTSIDE	Encapsulate
59	CEILING	UPPER	OUTSIDE	Encapsulate
62	DOOR CASING	A	OUTSIDE	Remove and replace
63	SOFFIT	A	OUTSIDE	Remove and replace
66	WALL	B	OUTSIDE	Encapsulate
67	WALL	C	OUTSIDE	Encapsulate
72	CORNERBOARD	C	OUTSIDE	Remove and replace
73	WALL	D	OUTSIDE	Encapsulate

19. Reevaluation and Monitoring Schedule

Each of these treatments will need to be reexamined periodically to make certain that they remain effective and to ensure that new lead-based paint hazards do not appear. The interim controls shown above are less expensive initially, but they may be more expensive in the long run since they need to be reevaluated more frequently. The replacement and paint removal methods are more expensive initially, but do not require any reevaluation.

The owner should monitor the condition of the paint at least annually or if there is some indication that paint might be failing. A professional reevaluation is also needed. The standard schedule for reevaluation the dwelling is shown above.

Reevaluation: Standard Reevaluation Schedule 3 contained in the HUD Guidelines applies to this property, since one of the rooms had a dust lead level greater than the

standard. Therefore, the dwelling should be reevaluated in N/A 12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in N/A (2 years later). If no lead-based paint hazards are identified at that time, no further reevaluations are needed. However, since lead-based paint may be present in the dwelling, the owner should monitor the condition of all painted surfaces at least annually or whenever other information indicates a potential problem.

Part IV: Site Specific Lead Hazard Control Plan

20. Lead Hazard Control Option To Be Implemented in This Property

I recommend abatement options be implemented on all areas with Lead Based Paint

21. Training Plan for Managers, Maintenance Supervisors and Workers

On File at Cherokee Nation Housing Rehab

22. Method of Resident Notification of Results of Risk Assessment and Lead Hazard Control Program

In Person by Cherokee Nation Housing Rehab

23. Signatures (Risk Assessor and Owner), Date and Certificate of Lead-Based Paint Compliance

Owner Signature

Date

Certified Risk Assessor Signature

Date

Certificate of Lead-Based Paint Compliance

I hereby certify that on _____ the dwelling located at _____ meets the criteria established by the Department of Housing and Urban Development for lead safety. Either no lead-based paint hazards were identified or all lead-based paint hazards have been corrected.

Owner

Authorized Signature

Risk Assessor License # _____

Expiration Date: _____

**Cherokee Nation
Environmental Programs**



EMSL Analytical, Inc.

3029 S. Jefferson, Saint Louis, MO 63118
Phone/Fax: (314) 577-0150 / (314) 776-3313
<http://www.EMSL.com> saintlouislab@emsl.com

EMSL Order: 391407862
CustomerID: CHER25
CustomerPO: 1456792
ProjectID:

Attn: **Michael Miley**
Cherokee Nation Environmental Programs
206 East Allen Road
Tahlequah, OK 74464

Phone: (918) 453-5370
Fax:
Received: 09/08/14 1:00 PM
Collected:

Project: Sandra Wickliffe

Test Report: Lead in Soils by Flame AAS (SW 846 3050B/7000B)*

<i>Client SampleDescription</i>	<i>Collected</i>	<i>Analyzed</i>	<i>RDL</i>	<i>Lead Concentration</i>
01 391407862-0001		9/9/2014	40 mg/Kg	410 mg/Kg

Jeff Siria, Laboratory Manager
or other approved signatory

*Analysis following Lead in Soil/Solids by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 40 mg/kg based on the minimum sample weight per our SOP. 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. Samples received in good condition unless otherwise noted. Results reported based on dry weight. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA-LAP, unless specifically indicated otherwise.

Samples analyzed by EMSL Analytical, Inc. Saint Louis, MO AIHA-LAP, LLC-ELLAP Accredited #102636

Initial report from 09/09/2014 11:51:37



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

391407862

St. Louis, MO 63118

PHONE: (314)-577-0150

FAX (314)-776-3313

Company: Cherokee Nation Environmental Programs		EMSL-Bill to: <input checked="" type="checkbox"/> Different <input type="checkbox"/> Same <small>If Bill to is Different note instructions in Comments**</small>		
Street: PO Box 948		Third Party Billing requires written authorization from third party		
City: Tahlequah	State/Province: OK	Zip/Postal Code: 74464	Country: United States	
Report To (Name): Michael Miley		Telephone #: 918-453-5009		
Email Address: michael-miley@cherokee.org		Fax #:	Purchase Order: 1456792	
Project Name/Number: Sandra Wickliffe		Please Provide Results: <input type="checkbox"/> FAX <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Mail		
U.S. State Samples Taken: OK		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt		
Turnaround Time (TAT) Options* - Please Check				
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input checked="" type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week				
<small>*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide</small>				
Matrix	Method	Instrument	Reporting Limit	Check
Chips <input type="checkbox"/> % by wt. <input type="checkbox"/> mg/cm ² <input type="checkbox"/> ppm	SW846-7000B	Flame Atomic Absorption	0.01%	<input type="checkbox"/>
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	<input type="checkbox"/>
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	<input type="checkbox"/>
	NIOSH 7300 modified	ICP-AES/ICP-MS	0.5 µg/filter	<input type="checkbox"/>
Wipe* <small>ASTM <input type="checkbox"/> non ASTM <input type="checkbox"/> *If no box is checked, non-ASTM Wipe is assumed</small>	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	1.0 µg/wipe	<input type="checkbox"/>
	SW846-7000B/7010	Graphite Furnace AA	0.075 µg/wipe	<input type="checkbox"/>
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1131/SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	SW846-7010	Graphite Furnace AA	0.3 mg/kg (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	2 mg/kg (ppm)	<input type="checkbox"/>
Wastewater Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.7	ICP-AES	0.020 mg/L (ppm)	<input type="checkbox"/>
Drinking Water Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
TSP/SPM Filter	40 CFR Part 50	ICP-AES	12 µg/filter	<input type="checkbox"/>
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	<input type="checkbox"/>
Other:				
Name of Sampler: Michael Miley		Signature of Sampler: <i>[Signature]</i>		
Sample #	Location	Volume/Area	Date/Time Sampled	
01	Dripline		9/3/2014	
			1:00 pm	
Client Sample #'s		Total # of Samples:		
Relinquished (Client): <i>[Signature]</i>	Date: 9/4/2014	Time: 8:21 am		
Received (Lab): <i>[Signature]</i>	Date: 9/8	Time: 1 pm		
Comments: <small>Bill To Cherokee Nation Environmental Programs, 208 E Allen Rd, Tahlequah, OK, 74464, United States Attention Ashley Wagon Phone 918-453-5009 Email ashley.wagon@cherokee.org Purchase Order: 1456792</small>				