

***LIMITED
LEAD INSPECTION***

**South Texas Veterans Health Care System
Audie L. Murphy Memorial VA Hospital
M003
7400 Merton Minter
San Antonio, Texas 78229**

for
**Ryan J. Reynolds, EIT
Resident Project Representative
R.H. Shackelford, Inc.**

by
AEHS, Inc.
4402 Center Gate
San Antonio, Texas 78217
(210) 656-9300
www.aehs-sa.com

LIMITED LEAD INSPECTION
South Texas Veterans Health Care System
Audie L. Murphy Memorial VA Hospital
M003
7400 Merton Minter
San Antonio, Texas 78229

The on-site inspection was performed by Matthew E. Bishop, CHSP, under the overall direction of Ronald M. Bishop, CIH. Matt is a Texas Department of State Health Services (TDSHS) licensed Lead Risk Assessor (No. 2070727) and Lead Project Designer (No. 2090062) as well as an Asbestos Management Planner and Mold Assessment Consultant. Ron Bishop is a TDSHS licensed Asbestos Consultant, Lead Risk Assessor, Lead Project Designer, and Mold Consultant as well as a Certified Industrial Hygienist, Certified Safety Executive, Registered Sanitarian, Diplomate in Environmental Health, Registered Environmental Professional and Registered Environmental Manager, Certified Environmental and Safety Compliance Officer, and Green Consultant.

1.0. GENERAL.

1.1. Background.

1.1.1. Inspections and risk assessments for lead base paint (LBP) hazards emerged in response to an insurance problem in the nation's public housing programs after children in housing units throughout the nation were found to contain elevated blood lead levels. When investigations pursued, the houses were found to contain LBP where deterioration was extensive and the children were ingesting the paint directly (chewing on the sills, etc.) or indirectly by placing contaminated items into their mouths.

1.1.2. At the present time, many of the standards used in lead hazard assessments are not health-based standards. A limit that will not produce adverse health affects has not been established for lead content of paint, dust or in soil. This is due in part to differences in individual behavior, particularly with respect to hand-to-mouth activity. However, the limits that are established in the various standards will significantly reduce the health impacts. Also, these limits dictate requirements for action, if exceeded.

1.1.3. The reason lead base paint inspections are conducted for commercial facilities is to determine potential worker exposure and environmental insult during demolition and disposal of the wastes based on the lead content.

1.2. Standards. As indicated in the Table 1 below, there are various standards that currently define lead base paint. The applicable standards to this project include the OSHA requirements, for worker protection performing the renovation, and the environmental requirements for disposal of materials painted with lead base paint.

Table 1
Lead Standards

Standard/Regulation	Level	Remarks
Consumer Product Safety Commission	600 ppm 0.06%	parts per million % by weight
HUD – 24 CFR Part 35	0.5% by weight 1.0 mg/cm ²	NLLAP Accredited Lab XRF
TELLR - Texas Environmental Lead Reduction Rules	0.5% by weight 1.0 mg/cm ²	NLLAP Accredited Lab XRF
OSHA - 29 CFR 1926.62 - Lead in Construction; Interim Final Rule	Any amount	Worker Protection
EPA - 40 CFR 261 - Identification and Listing of Hazardous Wastes	5 ppm TCLP	TCLP - Toxicity Characteristic Leaching Procedure

1.3. Lead Risk Assessment.

1.3.1. A Lead Risk Assessment is to determine, and then report on the existence, nature, severity, and location of lead base paint hazards in residential dwellings through on-site investigations. Normally, risk assessments determine the immediately available sources of lead in a dwelling and provides advice on long-term and/or short-term responses to any hazards found. In general, inspections measure lead base paint concentrations while risk assessments measure lead base paint hazards.

1.3.2. The specific differences between an Inspection and a Risk Assessment depicted in Table 2, below:

Table 2
Inspections/Risk Assessments

Inspections	Risk Assessments
Measure the concentration of lead in the paint on a surface-by-surface basis	Measure the level of lead in dust and soil and deteriorated paint
Identify the presence of lead base paint on all components	Identify the location and nature of all lead base paint hazards (primary prevention)
Allow the owner to avoid treating paint that is not lead base paint	Consider information about past maintenance and management practices
	Allow the owner to treat all lead hazards present

Limited Risk Assessment/Inspection

A combination of the Inspection and Risk Assessment tailored to the specific renovations to be performed under the specifications.

2.0. APPROACH.

2.1. Limited Inspection. A limited lead base paint inspection was conducted on 11 September 2013 within the Pump House (M003).

2.2. Credentials.

2.2.1. The Limited Inspection was performed by Matthew Bishop. Matt is a TDSHS certified Lead Risk Assessor which includes Lead Inspector (No. 2070727).

2.2.2. AEHS, Inc. is a TDSHS certified/licensed Lead Firm (No. 21100283) and Lead Training Provider (No. 20439)

2.3. Methodology. XRF measurements were taken at representative locations on interior and exterior painted surfaces in the area of concern as requested by the escort. XRF Niton Model XLp 300A (Serial No. 13422) was used in the testing for lead base paint. Calibrations were performed prior to and after testing each building in accordance with Performance Characteristics Sheets (PCS). See Appendix A for a table of the results.

3.0. DISCUSSION/CONCLUSIONS.

3.1. The HUD/EPA guidance for target housing is 1 mg/cm^2 while the Toxic Characteristic Leaching Procedure (TCLP) limit for lead is 5 parts per million (ppm).

3.2. The OSHA requirements, as promulgated in 29 CFR 1926.62 (Lead Standard for the Construction Industry), considers any amount of lead as lead containing paint; however, any measured surface below 0.1 mg/cm^2 should be considered negative for lead base paint.

4.0. RESULTS.

4.1. Twenty-nine (29) measurements were made with the XRF for lead content.

4.2. Based on the XRF measurements, AEHS, Inc. has determined that the following should be considered positive for lead base paint:

4.2.1. Red painted surfaces

4.2.2. Orange painted surfaces

5.0. RECOMMENDATIONS.

- 5.1.** Maintain a copy of this report with the project files.
- 5.2.** Provide a copy of this report to the contractor and/or personnel performing the renovation and inform them that they must comply with all provisions of 29 CFR 1926.62.

DISCLAIMER

This report, which contains inspections/measurements for hazardous material is given for the sole benefit of the aforementioned client(s). The client expressly confirms their understanding that the conclusions/ recommendations stated in this report are limited to and based solely upon the scope of the assignment, and samples and field measurements taken. In addition, the client understands that any field observations contained herein reflect the conditions present on the date and time of inspection. No representations or warranties are made or may be implied as to the validity of their applicability to any other days or times.



Ronald M. Bishop, MPH, CIH
Lead Risk Assessor (2070124)
Lead Project Designer (2090015)
16 September 2013

Appendix A
XRF Lead Measurement Results

Pump House
Audie L .Murphy VA Hospital
San Antonio, Texas

No.	Time	Side	Room	Component	Substrate	Condition	Color	Results	PbC
1	9/11/13 8:53								4.09
2	9/11/13 8:54			Calibration				Neg	0.9
3	9/11/13 8:54			Calibration				Neg	0.9
4	9/11/13 8:55			Calibration				Neg	0.9
5	9/11/13 8:57	Section 1	Pump House	Pipe	Metal	Fair	Yellow	Neg	0
6	9/11/13 8:58	Section 1	Pump House	Pipe	Metal	Fair	Blue	Neg	0
7	9/11/13 8:58	Section 1	Pump House	Pipe	Metal	Fair	Green	Neg	0.03
8	9/11/13 8:59	Section 1	Pump House	Base	Concrete	Fair	Red	Pos	0.13
9	9/11/13 9:00	Section 1	Pump House	Base	Concrete	Fair	Green	Neg	0.04
10	9/11/13 9:00	Section 1	Pump House	Pipe	Metal	Fair	Silver	Neg	0
11	9/11/13 9:01	Section 1	Pump House	Handle	Metal	Fair	Green	Neg	0
12	9/11/13 9:07	Section 1	Pump House	Handle	Metal	Fair	Red	Pos	0.5
13	9/11/13 9:08	Section 2	Pump House	Pipe	Metal	Fair	Yellow	Neg	0.05
14	9/11/13 9:08	Section 2	Pump House	Pipe	Metal	Fair	Black	Neg	0.05
15	9/11/13 9:09	Section 2	Pump House	Pipe	Metal	Fair	Blue	Neg	0
16	9/11/13 9:09	Section 2	Pump House	Pipe	Metal	Fair	White	Neg	0
17	9/11/13 9:09	Section 2	Pump House	Pipe	Metal	Fair	Silver	Neg	0.04
18	9/11/13 9:10	Section 2	Pump House	Ladder	Metal	Fair	Black	Neg	0.02
19	9/11/13 9:11	Section 2	Pump House	Support	Metal	Fair	Yellow	Neg	0
20	9/11/13 9:11	Section 2	Pump House	Base	Concrete	Fair	Yellow	Neg	0
21	9/11/13 9:12	Section 2	Pump House	Base	Concrete	Fair	Blue	Neg	0.03
22	9/11/13 9:13	Section 3	Pump House	Cylinder	Metal	Fair	Purple	Neg	0.03
23	9/11/13 9:14	Section 3	Pump House	Cylinder	Metal	Fair	Orange	Pos	1.5
24	9/11/13 9:15	Section 3	Pump House	Pipe	Metal	Fair	Blue	Neg	0
25	9/11/13 9:15	Section 3	Pump House	Pipe	Metal	Fair	Yellow	Neg	0.01
26	9/11/13 9:16	Section 3	Pump House	Motor	Metal	Fair	Gold	Neg	0
27	9/11/13 9:17	Section 3	Pump House	Base	Concrete	Fair	Blue	Neg	0.04
28	9/11/13 9:17	Section 3	Pump House	Base	Concrete	Fair	Green	Neg	0.09
29	9/11/13 9:17	Section 3	Pump House	Base	Concrete	Fair	Yellow	Neg	0
30	9/11/13 9:18	Section 3	Pump House	Support	Metal	Fair	Green	Neg	0
31	9/11/13 9:18	Section 3	Pump House	Support	Metal	Fair	Blue	Neg	0.06
32	9/11/13 9:19	Section 3	Pump House	Column	Concrete	Fair	Blue	Neg	0
33	9/11/13 9:21	Section 3	Pump House	Tank	Metal	Fair	Orange	Pos	0.18
34	9/11/13 9:22			Calibration				Neg	0.9
35	9/11/13 9:22			Calibration				Neg	0.9
36	9/11/13 9:22			Calibration				Pos	1.1

Appendix B

Photographs

M003 – Pump House
11 September 2013



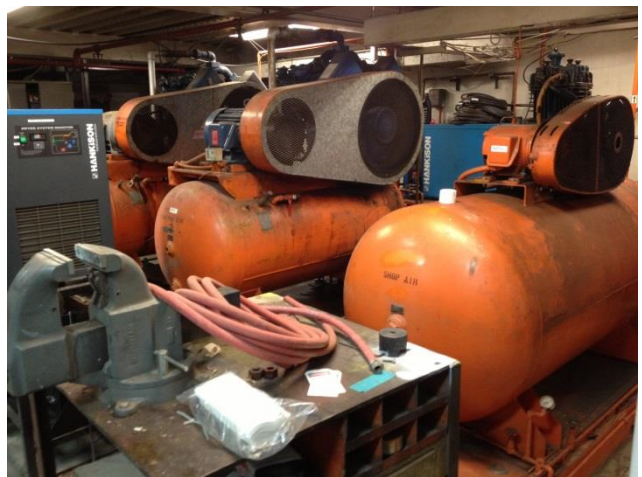
1. Red concrete base – 0.13 mg/cm^2



2. Red handles and piping – 0.5 mg/cm^2



3. Orange tank and piping – 1.5 mg/cm^2



4. Orange cylinders and appurtenances –
 0.18 mg/cm^2