ENVIRONMENTAL

LEAD BASED PAINT INSPECTION

Bob Stump Veterans Affairs Medical Center
Building 111 – Boiler Plant

500 North Highway 89
Prescott, Arizona

Order Number VA649-C10326

April 11, 2012

Prepared for:

Richard Trevino
Northern Arizona Veterans Affairs Health Care System
500 North Highway 89
Prescott, Arizona 86313

Prepared by:

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Reviewed by:

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Regional Manager

Project #11P-A3138

Executive Summary

As requested by the Northern Arizona Veterans Affairs Health Care System (NAVAHCS), IHI Environmental (IHI) conducted a Lead-based Paint (LBP) Inspection at the Building 111 – Boiler Plant facility located at the Bob Stump Veterans Affairs Medical Center, 500 North Highway 89, Prescott, Arizona.

The Lead-based Paint Inspection was performed to identify and locate lead-based paint at the facility. This inspection included a Paint Condition Inspection to identify Lead Hazards.

The following table summarizes the results.

XRF Samples	**226**
Positive for Lead (>1 mg/cm^2)	**84**
Components in Poor Condition	**1**

Based on the results of the survey, lead-based paint was identified on several exterior and interior building components. The paint on all of the components was considered to be in either intact or fair condition, with one exception. One component containing lead-based paint was considered to be in poor condition. Based on HUD guidelines, all painted components that are considered LBP (>1.0 mg/cm^2) and identified as being in poor condition, represent potential lead hazards.

Estimated costs for the abatement of lead-based painted components in poor condition range from $32 to $80. Details of the estimated costs are provided in Section 6 and Appendix D.

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Abbreviations and Definitions

ADEQ	**Arizona Department of Environmental Quality**
DEUR	**ADEQ's Waste Programs – Remediation and Declaration of Environmental Use Restriction**
AWP	**ADEQ's Waste Programs**
EPA	**U.S. Environmental Protection Agency**
EPCRA	**Emergency Planning and Community Right-to-Know Act**
Hazardous substance	A substance defined as a hazardous substance (Section 101(14) of CERCLA). In accordance with ASTM Standard E 1527, this definition includes petroleum products.
HUD	**U.S. Department of Housing and Urban Development**
HUD guidelines	HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, June 1995, US Department of Housing and Urban Development, (http://www.hud.gov/offices/lead/lbp/hudguidelines)
LBP	**Lead-based Paint.** HUD considers paint to be lead-based paint (LBP) if the concentration is 1.0 milligram of lead per square centimeter (1.0 mg/cm^2) or greater, or if the lead concentration is greater than 5,000 parts per million (ppm) or 0.5% by weight.
LBP Hazard	A lead-based paint "hazard" is any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated or is present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects.
OSHA	**Occupational Safety and Health Administration**
RCRA	**Resource Conservation and Recovery Act**. The regulations which govern the identification, management, transportation, and disposal of hazardous wastes from "cradle to grave."
VRP	**ADEQ's Voluntary Remediation Program**.

1.0 INTRODUCTION

The Northern Arizona Veterans Affairs Health Care System NAVAHCS retained IHI Environmental (IHI) to conduct a Lead-based Paint Inspection of the Bob Stump Veterans Affairs Medical Center facility, located at 500 North Highway 89, Prescott, Arizona.

1.1 Scope of Work

IHI was retained by NAVAHCS to conduct a Lead-based Paint Inspection (LBP) Inspection using methodology outlined in the HUD guidelines (HUD, 1995). Each painted space was analyzed using an X-ray fluorescence (XRF) spectrometer to determine the presence of lead-based paint. A sufficient number of samples were collected to meet HUD guidelines. This inspection included a Paint Condition Inspection to identify Lead Hazards.

The results, conclusions, and recommendations in this report are based on information identified during the performance of this inspection. If greater certainty or detail is needed to understand the risks associated with the presence of lead at the site, additional evaluation may be required. Floor plans of the building are presented in Appendix A.

2.0 METHODOLOGY

2.1 Lead-paint Inspection

The LBP Inspection was conducted by Mr. Oulono Folau, a Environmental Protection Agency (EPA)-accredited Lead Risk Assessor (PB-1056) on January 15, 2012.

Measurements for lead in paint were made using a *RMD LPA-1 Lead Paint Analyzer* (Serial Number 1195). The RMD non-destructively measures lead concentrations in painted surfaces, regardless of the number of paint layers present. Results are reported in mg/cm^2.

Quality control procedures included checking the internal calibration of the XRF before and after the testing was completed by taking three consecutive measurements on a National Institute for Standards and Technology (NIST) standard with a known concentration of lead.

2.2 Paint Condition Inspection

IHI inspected the condition of each painted material at the site. The condition of painted surfaces was determined based on the criteria found in Table 1.

Table 1
Paint Conditions
(as defined by HUD)

	Total Area of Deteriorated Paint on Each Component		
Type of Building Component[1]	**Intact**	**Fair[2]**	**Poor[3]**
Exterior components with large surface areas	Entire surface is intact	Less than or equal to 10 square feet	More than 10 square feet
Interior components with large surface areas (walls, ceilings, floors, doors)	Entire surface is intact	Less than or equal to 2 square feet	More than 2 square feet
Interior and exterior components with small surface areas (window sills, baseboards, soffits, trim)	Entire surface is intact	Less than or equal to 10 percent of the total surface area of the component	More than 10 percent of the total surface area of the component

Notes

1. Building component in this table refers to each individual component or side of building, not the combined surface area of all similar components in a room (e.g., a wall with 1 square foot of deteriorated paint is in "fair" condition, even if the other three walls in a room are intact).
2. Surfaces in "fair" condition should be repaired and/or monitored, but are not considered to be "lead-based paint hazards" as defined in by HUD guidelines.
3. Surfaces in "poor" condition are considered to be "lead-based paint hazards" as defined in HUD guidelines and should be addressed through abatement or interim controls.

3.0 RESULTS

In accordance with federal law, this Lead-Paint Inspection was conducted by Mr. Oulono Folau. A copy of his current EPA certificate for conducting lead based paint activities is presented in Appendix E.

3.1 Summary of LBP Inspection and Condition Results

A summary of the samples which tested positive as LBP (Appendix B, Summary Report) show 84 components tested positive for LBP, and two (2) components were identified as both LBP and in poor condition. Based on the HUD guidelines, the components in poor condition represent a lead hazard at the site. A complete set of the XRF data is presented in Appendix C.

4.0 LEAD HAZARD CONTROLS DISCUSSION

As outlined in the HUD guidelines there are two different types of control options for lead hazards. These are interim (temporary) controls or permanent abatement. Interim controls are less expensive initially, but may be more expensive than abatement in the long run since they need to be re-evaluated and maintained more frequently. If all lead-based paint surfaces are abated or replaced, no re-evaluation is needed.

4.1 Lead Hazard Controls for LBP Hazards

As a measure of controlling LBP hazards at this site, there are several interim controls that can be utilized; however, these methods will require ongoing monitoring to assure that the existing hazard has not returned or new hazards developed. A listing of these controls is as follows:

- **Paint film stabilization:** This interim control involves repair or restoration of existing substrate, removal of the loose or deteriorated paint, and applying a new protective coating, such as a sealant or a new coat of non lead-based paint.
- **Lead dust reduction:** This interim control involves the ongoing cleaning of potential lead dust-impacted surfaces through the use of a HEPA vacuum in addition to wet washing the impacted components.
- **Impact surface elimination or reduction:** This interim control involves the reconfiguration of the building components to eliminate impact surfaces. This can include lining window tracks with vinyl guides or the narrowing of doors or windows to eliminate impact surfaces.

As a measure of permanent elimination of the LBP hazard at the site, there are several abatement options that can be selected. These options will eliminate the source of the lead hazard and do not require ongoing monitoring. A listing of permanent abatement measures are as follows:

- **Lead-based paint removal:** This method involves the removal of the lead-based paint from the building components, using approved methods, such as approved low temperature heat guns, wet sanding or scraping, in addition to a HEPA vacuuming, and/or the use of approved chemical strippers. These methods should only be performed by trained lead abatement contractors.
- **Component replacement:** This method involves the removal and complete replacement of impacted building components with non lead-based painted materials.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Lead-paint Hazards

Based on HUD guidelines, all painted components that are considered LBP (>1.0 mg/cm^2) and were identified as being in poor condition, represent lead hazards. IHI identified one component that represents a lead hazard at the facility. Recommended Controls for the abatement of components include either lead-based paint removal or component replacement.

6.0 COST ESTIMATES FOR ABATEMENT

Cost Estimates for the abatement of lead-based painted components in poor condition are presented in Appendix D. The cost estimates for the abatement of LBP hazards were derived by use of the RS Means Cost Guide and through IHI's experience in the local and regional markets. The cost estimate provided is for use in long-term budgeting and planning only and does not have a level of accuracy sufficient to be used as construction design cost estimates. The actual cost of LBP abatement is highly dependent on a number of factors such as the size of the job (single room or window, or an entire floor or building); the required time frame for removal; the time of year the job is conducted; and travel time and distance to the job for the contractor. Therefore, actual removal costs could vary significantly from these estimates. Materials replacement and consultant abatement management costs are <u>not</u> included in these estimates and can add 15 - 50% to the project costs.

7.0 REFERENCES

HUD, 1995. *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, June 1995, US Department of Housing and Urban Development, (http://www.hud.gov/offices/lead/lbp/hudguidelines).

8.0 PROJECT LIMITATIONS

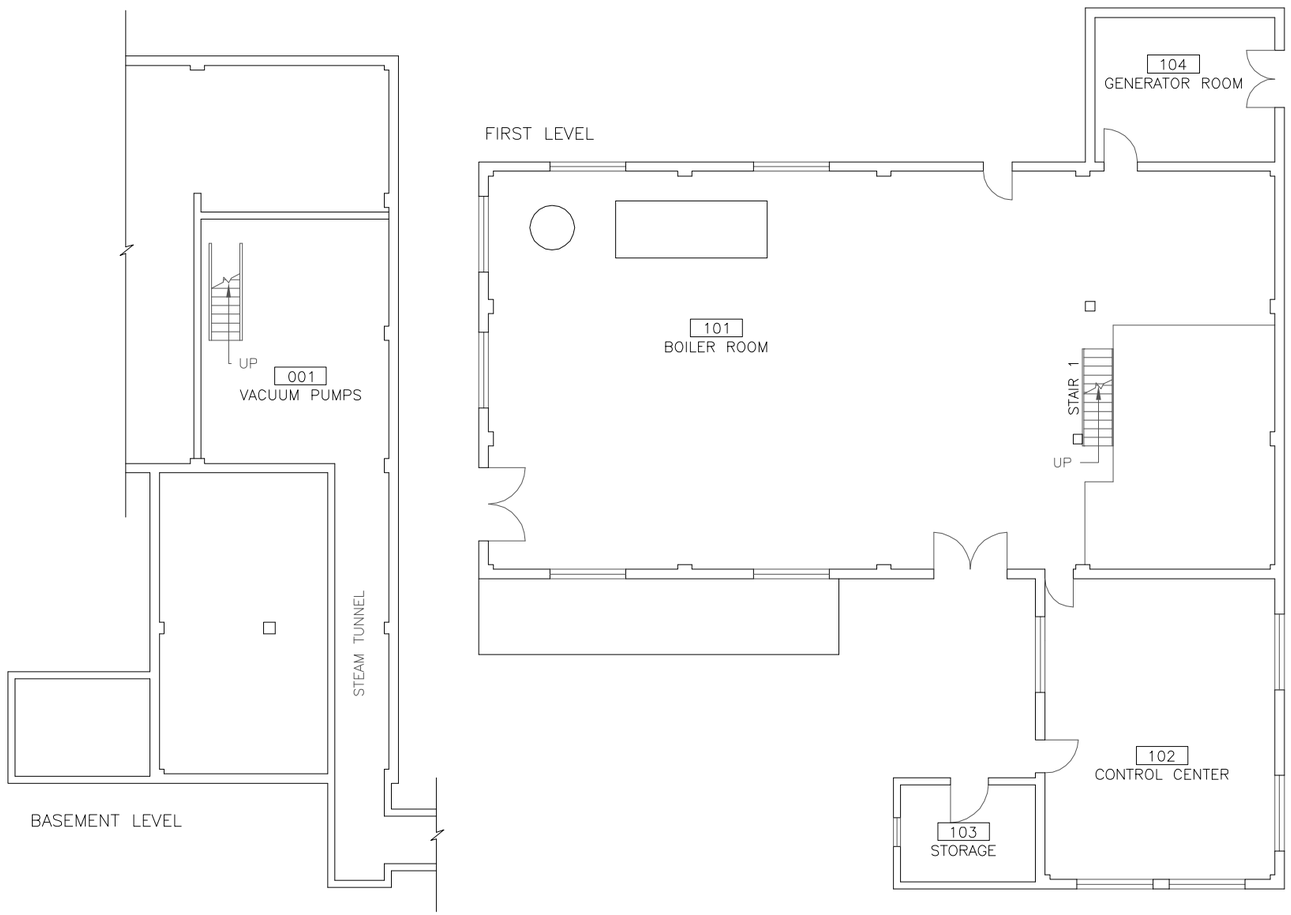
This project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by EH&S consultants performing similar services.

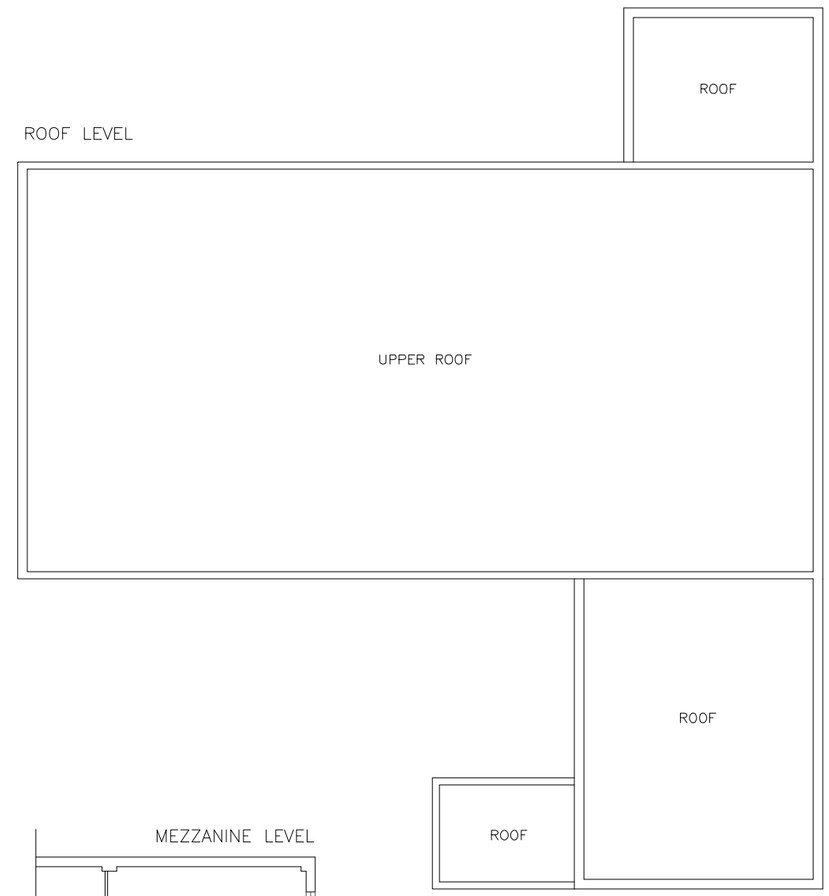
The procedures used attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time and other limitations, the conclusions should not be construed as a guarantee that all universal, toxic and/or hazardous wastes have been identified and fully evaluated. Furthermore, IHI assumes no responsibility for omissions or errors resulting from inaccurate information, or data, provided by sources outside of IHI or from omissions or errors in public records.

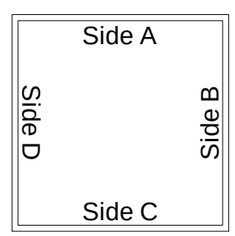
It is emphasized that the final decision on how much risk to accept always remains with the client since IHI is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

Appendix A

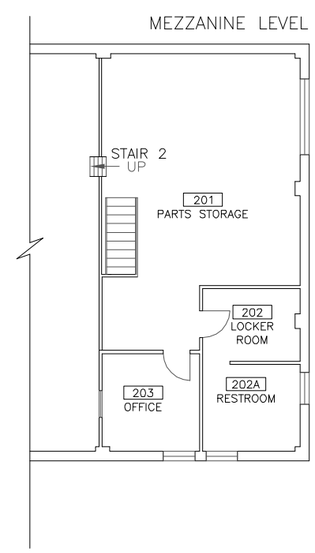
Floor Plans







Lead Sampling
Wall Reference Key
for Typical Room



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Department of Veterans Affairs
Northern Arizona Veterans Affairs Health Care System (NAVAHCS)
Boiler Plant - Building 111
Prescott, Arizona

Lead Sampling Wall Reference Key

N

0 8' 16'

PROJECT No:	11P-A3138
SHEET:	1_Pb
DRAWN BY:	MBradley
DATE:	2-18-12
REVISED BY:	
DATE:	
REVIEWED BY:	
DATE:	

V:\- 11 Projects\VAMC\11P-A3138 VAMC Prescott Ash-LBP Insp\Drawings\SR VA Asbestos Survey CAD\2004\11-P-A3138-2-18-12\11P-A3138-Bldg 111.dwg, AllFls, Pb, 2/20/2012 10:12:12 AM, mkeb

Appendix B

LBP Summary Sheet

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Building 111 - Boiler Plant

Inspection Date: 01/15/12
Report Date: 1/24/2012
Abatement Level: 1.0
Report No. 01/15/12 15:11
Total Readings: 226 Actionable: 84
Job Started: 01/15/12 15:11
Job Finished: 01/16/12 11:40

IHI Environmental #11P-A3138
NAVAHCS Prescott, Arizona

Read No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Paint Color	Lead (mg/cm²)	Mode
Exterior Room 001 Number Only									
189	A	ladder	Ctr		I	Metal	Brown	1.8	QM
187	A	Window	Rgt	Rgt jamb	I	Metal	Green	2.1	QM
188	A	Window	Rgt	Sash	I	Metal	Green	2.9	QM
198	A	Door	Ctr	Rgt jamb	I	Wood	Green	1.5	QM
197	A	Door	Ctr	U Lft	I	Wood	Green	>9.9	QM
204	B	Window	Ctr	Sash	I	Metal	Green	4.5	QM
205	B	Window	Ctr	Lft jamb	I	Metal	Green	4.8	QM
211	C	Window	Lft	Rgt jamb	I	Metal	Green	>9.9	QM
218	C	Window	Lft	Rgt jamb	I	Metal	Green	>9.9	QM
212	C	Window	Lft	Sash	I	Metal	Green	8.1	QM
207	C	Window	Rgt	Rgt jamb	I	Metal	Green	4.7	QM
206	C	Window	Rgt	Sash	I	Metal	Green	3.7	QM
209	C	Door	Lft	Header	I	Metal	Green	7.6	QM
210	C	Door	Lft	Lft casing	I	Metal	Green	>9.9	QM
216	C	Door	Lft	U Rgt	I	Metal	Green	>9.9	QM
219	D	Window	Lft	Sash	I	Metal	Green	8.0	QM
217	D	Door	Lft	Rgt casing	I	Metal	Green	>9.9	QM
Interior Room 001 201									
020	A	Pipe	Lft		I	Metal	Yellow	4.9	QM
014	B	ladder	Rgt		I	Metal	Brown	2.7	QM
015	B	Crown Mldg	Rgt		I	Wood	Brown	2.4	QM
021	B	Pipe	Rgt		I	Metal	Yellow	7.4	QM
022	B	Pipe	Rgt		I	Metal	Yellow	2.9	QM
023	B	I-beam	Rgt		I	Metal	Yellow	3.9	QM
007	B	Window	Lft	Rgt jamb	I	Metal	Brown	2.4	QM
008	B	Window	Lft	Sash	I	Metal	Brown	2.1	QM
030	C	Pipe	Ctr		I	Metal	Blue	1.0	QM
026	C	I-beam	Rgt		I	Metal	Yellow	5.6	QM
027	C	Truss	Rgt		I	Metal	Yellow	8.7	QM
028	C	ladder	Rgt		I	Metal	Gray	2.5	QM
013	C	Wall	L Lft	gate	I	Metal	Beige	7.4	QM
017	D	Railing	Rgt	Balusters	I	Metal	Beige	2.9	QM
016	D	Railing	Rgt	Railing	I	Metal	Beige	2.3	QM
Interior Room 002 202									
031	B	Ceiling	Ctr		I	Plaster	White	1.0	QM
035	D	Door	Ctr	Rgt jamb	I	Metal	Brown	1.8	QM
034	D	Door	Ctr	U Rgt	I	Wood	Brown	3.2	QM
Interior Room 003 202a									
039	B	Pipe	Ctr		I	Metal	White	3.1	QM
043	B	Radiator	Ctr		I	Metal	White	1.4	QM
036	B	Ceiling	Ctr		I	Plaster	White	2.0	QM
037	B	Window	Ctr	Header	I	Metal	Brown	>9.9	QM
038	B	Window	Ctr	Sash	I	Metal	Brown	2.4	QM

041	C	Window	Ctr	Header	I	Metal	Brown	8.1	QM
040	C	Window	Ctr	Sash	I	Metal	Brown	3.2	QM

Interior Room 004 203

045	C	Window	Ctr	Rgt jamb	P	Plaster	Brown	2.3	QM
044	C	Window	Ctr	Sill	I	Wood	Brown	3.6	QM
046	D	Window	Ctr	Rgt casing	I	Metal	Brown	3.8	QM

Interior Room 005 stair 2 &cw

063	A	Window	Ctr	Frame	I	Metal	Green	6.3	QM
050	A	Railing	Ctr	Railing	I	Metal	Beige	1.8	QM
057	D	vert column	Lft		I	Metal	Beige	1.7	QM
058	D	hrzntl beam	Lft		I	Metal	Beige	2.9	QM
053	D	Railing	Ctr	Balusters	I	Metal	Beige	5.2	QM

Interior Room 006 stair 1

065	B	Stairs	Ctr	Balusters	I	Metal	Beige	5.0	QM
064	B	Stairs	Ctr	Railing cap	I	Metal	Beige	1.7	QM
067	D	Stairs	Ctr	Balusters	I	Metal	Beige	5.2	QM
066	D	Stairs	Ctr	Railing cap	I	Metal	Beige	2.4	QM

Interior Room 007 101

082	A	Pipe	Rgt		I	Metal	Yellow	3.5	QM
083	A	pump	Rgt	pan	I	Metal	Yellow	4.7	QM
120	A	boiler 2	Rgt	column	I	Metal	Beige	3.5	QM
075	A	Window	Ctr	Sash	I	Metal	Green	2.4	QM
076	A	Window	Ctr	Lft jamb	I	Metal	Green	1.8	QM
074	A	Door	Rgt	Lft casing	I	Metal	Green	3.7	QM
078	A	Column	Ctr		I	Metal	Beige	4.0	QM
131	B	Floor	Rgt	gutter	I	Metal	Brown	2.0	QM
089	C	Pipe	Lft		I	Metal	Gray	>9.9	QM
128	C	boiler 3	Rgt	pipe	I	Metal	silver	1.0	QM
129	C	boiler 3	Rgt	pipe	I	Metal	Yellow	2.7	QM
095	C	Floor	Ctr	gutter	I	Metal	Brown	1.0	QM
091	C	Door	Ctr	Lft casing	I	Metal	Green	2.8	QM
090	C	Door	Ctr	L Lft	I	Metal	Green	1.0	QM
103	D	Pipe	Ctr		I	Metal	Yellow	>9.9	QM
	on boiler 1								
100	D	Window	Ctr	Rgt jamb	I	Metal	Green	1.0	QM
099	D	Door	Lft	Lft casing	I	Metal	Green	1.6	QM
098	D	Door	Lft	L Ctr	I	Metal	Green	1.0	QM
104	D	Column	Ctr		I	Metal	Beige	4.5	QM

Interior Room 008 102

138	B	Pipe	Ctr		I	Metal	silver	4.2	QM
142	C	Window	Rgt	Rgt jamb	I	Metal	Brown	2.2	QM
143	C	Window	Rgt	Sash	I	Metal	Brown	2.8	QM
147	D	Window	Rgt	Sash	I	Metal	Brown	2.5	QM
146	D	Window	Rgt	Lft jamb	I	Concrete	Brown	3.5	QM
149	D	Door	Ctr	Rgt casing	I	Wood	Brown	2.8	QM

Interior Room 011 stair 3

168	D	Stairs	Rgt	Balusters	I	Metal	Beige	3.4	QM
167	D	Stairs	Rgt	Railing cap	I	Metal	Beige	3.1	QM

Interior Room 012 001

178	B	Column	Ctr		I	Metal	Beige	5.4	QM
183	C	Pipe	Rgt		I	Metal	Green	3.5	QM

Interior Room 013 steam tnl

186	C	Floor	Ctr		I	Metal	Green	2.3	QM

Calibration Readings

---- End of Readings ----

Paint Condition
I = Intact
F = Fair
P = Poor

Appendix C

XRF Data

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Building 111 - Boiler Plant

Inspection Date: 01/15/12
Report Date: 1/24/2012
Abatement Level: 1.0
Report No. 01/15/12 15:11
Total Readings: 226
Job Started: 01/15/12 15:11
Job Finished: 01/16/12 11:40

IHI Environmental #11P-A3138
NAVAHCS Prescott, Arizona

Read No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Paint Color	Lead (mg/cm²)	Mode
Exterior Room 001 Number Only									
189	A	ladder	Ctr		I	Metal	Brown	1.8	QM
190	A	vent	Ctr	rail	I	Metal	Green	0.0	QM
192	A	vent	Ctr		I	Metal	Green	-0.1	QM
193	A	vent	Ctr		I	Metal	Green	-0.3	QM
194	A	vent	Ctr	casing	I	Metal	Green	0.2	QM
195	A	vent	Ctr	floor	I	Metal	Green	0.4	QM
196	A	Pipe	Ctr		I	Metal	Gray	0.1	QM
201	A	Pipe	Ctr		I	Metal	Red	0.1	QM
187	A	Window	Rgt	Rgt jamb	I	Metal	Green	2.1	QM
188	A	Window	Rgt	Sash	I	Metal	Green	2.9	QM
200	A	Door	Ctr	threshold	I	Concrete	Yellow	0.0	QM
198	A	Door	Ctr	Rgt jamb	I	Wood	Green	1.5	QM
199	A	Door	Ctr	Lft casing	I	Wood	Green	0.4	QM
197	A	Door	Ctr	U Lft	I	Wood	Green	>9.9	QM
191	A	Railing	Ctr	Balusters	I	Metal	Green	0.5	QM
204	B	Window	Ctr	Sash	I	Metal	Green	4.5	QM
205	B	Window	Ctr	Lft jamb	I	Metal	Green	4.8	QM
203	B	Door	Rgt	Rgt casing	I	Metal	Green	0.3	QM
202	B	Door	Rgt	U Lft	I	Metal	Green	0.5	QM
213	C	bollard	Lft		I	Metal	Yellow	-0.2	QM
214	C	Pipe	Lft		I	Metal	Yellow	0.0	QM
215	C	Pipe	Lft		I	Metal	Yellow	0.2	QM
208	C	bollard	Rgt		I	Metal	Red	0.1	QM
211	C	Window	Lft	Rgt jamb	I	Metal	Green	>9.9	QM
218	C	Window	Lft	Rgt jamb	I	Metal	Green	>9.9	QM
212	C	Window	Lft	Sash	I	Metal	Green	8.1	QM
207	C	Window	Rgt	Rgt jamb	I	Metal	Green	4.7	QM
206	C	Window	Rgt	Sash	I	Metal	Green	3.7	QM
209	C	Door	Lft	Header	I	Metal	Green	7.6	QM
210	C	Door	Lft	Lft casing	I	Metal	Green	>9.9	QM
216	C	Door	Lft	U Rgt	I	Metal	Green	>9.9	QM
220	D	Floor	Lft	threshold	I	Concrete	Yellow	-0.1	QM
219	D	Window	Lft	Sash	I	Metal	Green	8.0	QM
217	D	Door	Lft	Rgt casing	I	Metal	Green	>9.9	QM
Interior Room 001 201									
020	A	Pipe	Lft		I	Metal	Yellow	4.9	QM
014	B	ladder	Rgt		I	Metal	Brown	2.7	QM
015	B	Crown Mldg	Rgt		I	Wood	Brown	2.4	QM
021	B	Pipe	Rgt		I	Metal	Yellow	7.4	QM
022	B	Pipe	Rgt		I	Metal	Yellow	2.9	QM
023	B	I-beam	Rgt		I	Metal	Yellow	3.9	QM
007	B	Window	Lft	Rgt jamb	I	Metal	Brown	2.4	QM
008	B	Window	Lft	Sash	I	Metal	Brown	2.1	QM
025	B	Railing	Rgt	Balusters	I	Metal	Gray	0.7	QM
024	B	Railing	Rgt	Railing	I	Metal	Gray	0.1	QM

010	C	cabinet		Lft		I	Wood	Brown	-0.1	QM
011	C	cabinet		Lft	door	I	Wood	Brown	0.1	QM
012	C	cabinet		Lft	shelf	I	Wood	Brown	0.2	QM
029	C	Pipe		Ctr		I	Metal	silver	0.3	QM
030	C	Pipe		Ctr		I	Metal	Blue	1.0	QM
026	C	I-beam		Rgt		I	Metal	Yellow	5.6	QM
027	C	Truss		Rgt		I	Metal	Yellow	8.7	QM
028	C	ladder		Rgt		I	Metal	Gray	2.5	QM
009	C	Wall	L	Lft		I	Brick	Brown	-0.1	QM
013	C	Wall	L	Lft	gate	I	Metal	Beige	7.4	QM
018	D	Stairs		Rgt	threshold	I	Concrete	Yellow	0.1	QM
019	D	Stairs		Rgt	threshold	I	Concrete	Beige	-0.1	QM
017	D	Railing		Rgt	Balusters	I	Metal	Beige	2.9	QM
016	D	Railing		Rgt	Railing	I	Metal	Beige	2.3	QM

Interior Room 002 202

032	B	Baseboard		Ctr		I	Wood	Brown	0.3	QM
031	B	Ceiling		Ctr		I	Plaster	White	1.0	QM
033	D	Baseboard		Ctr		I	Wood	Brown	-0.1	QM
035	D	Door		Ctr	Rgt jamb	I	Metal	Brown	1.8	QM
034	D	Door		Ctr	U Rgt	I	Wood	Brown	3.2	QM

Interior Room 003 202a

039	B	Pipe		Ctr		I	Metal	White	3.1	QM
043	B	Radiator		Ctr		I	Metal	White	1.4	QM
036	B	Ceiling		Ctr		I	Plaster	White	2.0	QM
037	B	Window		Ctr	Header	I	Metal	Brown	>9.9	QM
038	B	Window		Ctr	Sash	I	Metal	Brown	2.4	QM
042	C	Baseboard		Ctr		I	Metal	Brown	0.2	QM
041	C	Window		Ctr	Header	I	Metal	Brown	8.1	QM
040	C	Window		Ctr	Sash	I	Metal	Brown	3.2	QM

Interior Room 004 203

049	A	Door		Ctr	Rgt jamb	I	Metal	Brown	0.1	QM
048	A	Door		Ctr	U Rgt	I	Wood	Brown	0.0	QM
045	C	Window		Ctr	Rgt jamb	P	Plaster	Brown	2.3	QM
044	C	Window		Ctr	Sill	I	Wood	Brown	3.6	QM
047	D	Baseboard		Ctr		I	Wood	White	0.0	QM
046	D	Window		Ctr	Rgt casing	I	Metal	Brown	3.8	QM

Interior Room 005 stair 2 &cw

061	A	tank		Lft		I	Metal	silver	-0.1	QM
062	A	tank		Lft	pipe	I	Metal	silver	-0.1	QM
063	A	Window		Ctr	Frame	I	Metal	Green	6.3	QM
051	A	Railing		Ctr	Balusters	I	Metal	Beige	-0.1	QM
050	A	Railing		Ctr	Railing	I	Metal	Beige	1.8	QM
056	D	ladder		Lft		I	Metal	Brown	0.2	QM
057	D	vert column		Lft		I	Metal	Beige	1.7	QM
058	D	hrzntl beam		Lft		I	Metal	Beige	2.9	QM
059	D	ladder		Ctr		I	Metal	Brown	-0.1	QM
060	D	ladder		Rgt		I	Metal	Brown	-0.2	QM
055	D	Stairs		Ctr	Stringers	I	Metal	Beige	-0.1	QM
054	D	Stairs		Ctr	Treads	I	Metal	Beige	0.6	QM
053	D	Railing		Ctr	Balusters	I	Metal	Beige	5.2	QM
052	D	Railing		Ctr	Railing	I	Metal	Beige	0.3	QM

Interior Room 006 stair 1

072	B	Stairs		Ctr	Stringers	I	Concrete	Beige	-0.1	QM
065	B	Stairs		Ctr	Balusters	I	Metal	Beige	5.0	QM
064	B	Stairs		Ctr	Railing cap	I	Metal	Beige	1.7	QM
068	D	Stairs		Ctr	Treads	I	Metal	Beige	0.0	QM
071	D	Stairs		Ctr	Treads	I	Metal	Brown	0.7	QM
069	D	Stairs		Ctr	Risers	I	Metal	Beige	0.2	QM

070	D	Stairs	Ctr	Risers	I	Metal	Brown	0.2	QM
067	D	Stairs	Ctr	Balusters	I	Metal	Beige	5.2	QM
066	D	Stairs	Ctr	Railing cap	I	Metal	Beige	2.4	QM

Interior Room 007 101

080	A	I-beam	Rgt	pipe suppor	I	Metal	Beige	0.0	QM
081	A	Pipe	Rgt	Sprinkler	I	Metal	Red	0.4	QM
082	A	Pipe	Rgt		I	Metal	Yellow	3.5	QM
083	A	pump	Rgt	pan	I	Metal	Yellow	4.7	QM
084	A	pump	Rgt	footer	I	Concrete	Beige	-0.2	QM
085	A	equipment	Rgt		I	Metal	Green	0.0	QM
113	A	boiler 2	Rgt		I	Metal	Green	-0.2	QM
118	A	boiler 2	Rgt	valve	I	Metal	Blue	0.6	QM
119	A	boiler 2	Rgt	valve	I	Metal	silver	-0.2	QM
120	A	boiler 2	Rgt	column	I	Metal	Beige	3.5	QM
122	A	boiler 2	Rgt	valve	I	Metal	silver	-0.1	QM
077	A	Baseboard	Ctr		I	Concrete	Beige	0.3	QM
117	A	Floor	Rgt	gutter	I	Metal	Brown	0.4	QM
075	A	Window	Ctr	Sash	I	Metal	Green	2.4	QM
076	A	Window	Ctr	Lft jamb	I	Metal	Green	1.8	QM
073	A	Door	Rgt	Header	I	Wood	Green	0.6	QM
074	A	Door	Rgt	Lft casing	I	Metal	Green	3.7	QM
078	A	Column	Ctr		I	Metal	Beige	4.0	QM
079	A	Column	Ctr	footer	I	Concrete	Beige	-0.1	QM
121	A	Column	Rgt	footer	I	Concrete	Beige	0.3	QM
088	B	tank	Lft		I	Metal	Gray	0.2	QM
114	B	boiler 2	Rgt		I	Metal	Green	0.4	QM
115	B	boiler 2	Rgt	Frame	I	Metal	Green	0.0	QM
116	B	boiler 2	Rgt	footer	I	Concrete	Beige	0.0	QM
086	B	Floor	Lft		I	Concrete	Beige	-0.1	QM
087	B	Floor	Lft	footer	I	Concrete	Beige	-0.1	QM
131	B	Floor	Rgt	gutter	I	Metal	Brown	2.0	QM
089	C	Pipe	Lft		I	Metal	Gray	>9.9	QM
096	C	sw board	Ctr		I	Metal	Black	-0.1	QM
097	C	Pipe	Rgt		I	Metal	Yellow	0.3	QM
123	C	boiler 3	Rgt		I	Metal	Green	0.2	QM
125	C	boiler 3	Rgt	Frame	I	Metal	Green	0.2	QM
126	C	boiler 3	Rgt	footer	I	Concrete	Beige	0.4	QM
127	C	boiler 3	Rgt	valve	I	Metal	silver	0.0	QM
128	C	boiler 3	Rgt	pipe	I	Metal	silver	1.0	QM
129	C	boiler 3	Rgt	pipe	I	Metal	Yellow	2.7	QM
130	C	boiler 3	Rgt	column	I	Metal	Beige	0.1	QM
094	C	Baseboard	Ctr		I	Concrete	Beige	0.3	QM
095	C	Floor	Ctr	gutter	I	Metal	Brown	1.0	QM
092	C	Window	Ctr	Rgt jamb	I	Metal	Green	0.1	QM
093	C	Window	Ctr	Sash	I	Metal	Green	0.0	QM
091	C	Door	Ctr	Lft casing	I	Metal	Green	2.8	QM
090	C	Door	Ctr	L Lft	I	Metal	Green	1.0	QM
103	D	Pipe	Ctr		I	Metal	Yellow	>9.9	QM
	on boiler 1								
105	D	boiler	Ctr	footer	I	Concrete	Beige	0.1	QM
106	D	boiler	Ctr	Frame	I	Metal	Green	-0.1	QM
107	D	boiler 1	Ctr		I	Metal	Green	0.2	QM
108	D	boiler 1	Rgt		I	Metal	Green	0.0	QM
109	D	boiler 1	Rgt		I	Metal	silver	0.2	QM
110	D	boiler 1	Rgt	pipe	I	Metal	silver	-0.3	QM
111	D	boiler 1	Rgt	valve	I	Metal	Blue	0.3	QM
112	D	boiler 1	Rgt	ladder	I	Metal	Brown	0.4	QM
124	D	boiler 3	Rgt		I	Metal	Green	0.5	QM
102	D	Baseboard	Ctr		I	Concrete	Beige	0.5	QM
100	D	Window	Ctr	Rgt jamb	I	Metal	Green	1.0	QM
101	D	Window	Ctr	Sash	I	Metal	Green	-0.1	QM
099	D	Door	Lft	Lft casing	I	Metal	Green	1.6	QM

098	D	Door	Lft	L Ctr	I	Metal	Green	1.0	QM
104	D	Column	Ctr		I	Metal	Beige	4.5	QM

Interior Room 008 102

134	A	Baseboard	Lft		I	Brick	Brown	0.0	QM
133	A	Door	Lft	Rgt casing	I	Metal	Beige	-0.1	QM
132	A	Door	Lft	U Lft	I	Metal	Beige	-0.1	QM
138	B	Pipe	Ctr		I	Metal	silver	4.2	QM
135	B	Baseboard	Lft		I	Concrete	Beige	0.5	QM
137	B	Window	Lft	Sash	I	Metal	Beige	0.2	QM
136	B	Window	Lft	Sill	I	Concrete	Beige	0.3	QM
152	C	bench	Ctr		I	Concrete	Beige	0.0	QM
153	C	bench	Ctr	top	I	Wood	Brown	-0.3	QM
139	C	Wall	L Ctr		I	Concrete	Beige	-0.1	QM
140	C	Wall	L Rgt		I	Concrete	Beige	0.5	QM
150	C	Floor	Ctr		I	Concrete	Beige	-0.1	QM
142	C	Window	Rgt	Rgt jamb	I	Metal	Brown	2.2	QM
143	C	Window	Rgt	Sash	I	Metal	Brown	2.8	QM
141	C	Window	Rgt	Sill	I	Concrete	Beige	0.2	QM
151	C	Column	Ctr		I	Concrete	Beige	0.5	QM
144	D	Wall	L Ctr		I	Concrete	Beige	0.1	QM
147	D	Window	Rgt	Sash	I	Metal	Brown	2.5	QM
145	D	Window	Rgt	Sill	I	Concrete	Beige	0.3	QM
146	D	Window	Rgt	Lft jamb	I	Concrete	Brown	3.5	QM
148	D	Door	Ctr	Header	I	Wood	Brown	0.5	QM
149	D	Door	Ctr	Rgt casing	I	Wood	Brown	2.8	QM

Interior Room 009 103

154	A	Floor	Ctr		I	Concrete	Beige	-0.1	QM
157	A	Door	Ctr	threshold	I	Concrete	Beige	-0.2	QM
158	A	Door	Ctr	threshold	I	Concrete	Yellow	0.4	QM
156	A	Door	Ctr	Lft casing	I	Metal	Green	0.2	QM
155	A	Door	Ctr	U Lft	I	Metal	Green	-0.1	QM

Comment: no paint on walls & ceiling

Interior Room 010 104

160	A	generator	Ctr	footer	I	Concrete	Beige	-0.1	QM
159	A	Floor	Ctr		I	Concrete	Beige	-0.3	QM
163	B	Door	Ctr	Rgt jamb	I	Metal	Brown	0.0	QM
162	B	Door	Ctr	U Rgt	I	Metal	Brown	-0.1	QM
161	B	Door	Ctr	U Lft	I	Metal	Brown	-0.2	QM
165	C	Door	Rgt	Rgt jamb	I	Metal	Brown	-0.1	QM
166	C	Door	Rgt	Lft casing	I	Wood	Brown	0.0	QM
164	C	Door	Rgt	U Rgt	I	Metal	Brown	-0.1	QM

Comment: no paint on walls & ceiling

Interior Room 011 stair 3

173	D	Stairs	Rgt	Stringers	I	Concrete	Beige	0.5	QM
172	D	Stairs	Rgt	Baseboard	I	Concrete	Beige	0.2	QM
169	D	Stairs	Rgt	Treads	I	Concrete	Brown	0.6	QM
170	D	Stairs	Rgt	Treads	I	Concrete	Beige	-0.1	QM
171	D	Stairs	Rgt	Risers	I	Concrete	Beige	0.2	QM
168	D	Stairs	Rgt	Balusters	I	Metal	Beige	3.4	QM
167	D	Stairs	Rgt	Railing cap	I	Metal	Beige	3.1	QM

Interior Room 012 001

176	A	pump	Ctr	footer	I	Concrete	Beige	0.7	QM
181	A	pump	Ctr		I	Metal	silver	0.0	QM
175	A	Baseboard	Ctr		I	Concrete	Beige	-0.1	QM
177	B	pump	Ctr	footer	I	Concrete	Beige	0.1	QM
178	B	Column	Ctr		I	Metal	Beige	5.4	QM
183	C	Pipe	Rgt		I	Metal	Green	3.5	QM
184	C	Floor	Lft	grate	I	Metal	Red	-0.2	QM

179	D	post	Lft	I	Metal	Beige	-0.1	QM
182	D	pump	Ctr	I	Metal	Gray	-0.2	QM
180	D	ladder	Rgt	I	Metal	Brown	0.2	QM
174	D	Floor	Ctr	I	Concrete	Beige	-0.1	QM

Interior Room 013 steam tnl

185	A	Floor	Lft	I	Concrete	Beige	-0.1	QM
186	C	Floor	Ctr	I	Metal	Green	2.3	QM

Calibration Readings

001	-0.1	Std
002	-0.2	Std
003	-0.2	Std
004	1.0	Std
005	1.0	Std
006	0.8	Std
221	-0.1	Std
222	-0.1	Std
223	-0.1	Std
224	1.0	Std
225	1.0	Std
226	0.9	Std

---- End of Readings ----

Paint Condition
I = Intact
F = Fair
P = Poor

Appendix D

Cost Estimates

NAVAHCS Building 111 - Boiler Plant
Lead-Based Paint Abatement Cost
Estimates
Components in Poor Condition

			Chemical Removal		Component Removal	
Room Number	**Building Component**	**Quantity (sf)**	**Unit Cost**	**Total***	**Unit Cost**	**Total***
Interior – Rm 203 Wall C	Window Jam	6	$13.31	$79.86	$5.32	$31.92
			Total	$79.86		$31.92

Appendix E

IHI Certifications

CWD International, Inc. dba

Environmental Training Fund

39094.678CERT/PBIRE 900 N.W. 5TH Avenue, Fort Lauderdale, Florida 33311 (954) 524-7208 Processed By:

Seagull

To Authenticate Certificate:
www.seagulltraining.com
1-800-966-9933

This is to Certify that

Oulono Folau

XXX-XX-8293

1729 W. 1000 N. , Salt Lake City,UT 84116

has successfully completed an English

Lead 8 Hr. Building Inspector Refresher

11-Jan-11 TO 11-Jan-11

Initial courses include an extensive hands-on component.

Complies with Sec. 402 TSCA 15 USC 2682 and Accredited by the IL-DPH, CT-DPH, MO-DOH, PA-DLI, T

Trainer(s): Robert Barclay

EST SCORE: 96 Training Address: 640E. Wilmington Ave (700 E. 2200 S.), Salt Lake City, UT

Passed the hands-on assessment & completed the course exam on: 11-Jan-11

UNDER CIVIL AND CRIMINAL PENALTIES OF LAW FOR MAKING OR SUBMISSION OF FALSE OR FRAUDULENT STATEMENTS OR REPRESENTATIONS (18 U.S.C. [illegible] AND 15 U.S.C. [illegible]), I HEREBY CERTIFY THAT THIS TRAINING COURSE IS WITHIN THE APPLICABLE REQUIREMENTS OF TITLE IV, SUBTITLE "TOXIC SUBSTANCES CONTROL ACT", 40 CFR PART [illegible] OR TO THE [illegible] APPLICABLE FEDERAL, STATE OR LOCAL REQUIREMENTS AS AMENDED.

James F. Stump, Training Manager

Certificate Number..... 146648

This Certificate Expires:

OSHA DATE: 11-Jan-12
SUNSET DATE: 10-Jan-14

10-Jan-14
GA-PreAudit

Course Number UT1102

USEPA's actual expiration date will appear on individual's license. See individual state rules for actual state expiration date.

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LITHO. IN U.S.A.