



UNIVERSAL

ENGINEERING SCIENCES

LEAD-BASED PAINT SURVEY

Conducted on

John Pennekamp Coral Reef State Park - Playground
102601 Overseas Highway
Key Largo, Monroe County, Florida 33037

UES Project No. 2140.1900055.0000
UES Report No. 1716272

Prepared for:

Weiler Engineering Company
201 West Marion Avenue, Suite 1306
Punta Gorda, Florida 33950
Attention: Robin Palmer, E.I.

Prepared by:

Universal Engineering Sciences, Inc.
9960 NW 116th Way, Suite 8
Medley, Florida 33178
(305) 249-8434
www.UniversalEngineering.com

Survey Date: October 3, 2019
Report Date: October 9, 2019

Consultants in: Geotechnical Engineering • Environmental Sciences • Construction Materials Testing • Threshold Inspection
Offices in: Orlando • Daytona Beach • Fort Myers • Gainesville • Jacksonville • Ocala • Palm Coast • Rockledge • Sarasota • Miami
Pensacola • Panama City • Fort Pierce • St. Petersburg • Tampa • West Palm Beach • Atlanta, GA • Tifton, GA



UNIVERSAL ENGINEERING SCIENCES

Consultants In: Geotechnical Engineering • Environmental Sciences
Geophysical Services • Construction Materials Testing • Threshold Inspection
Building Inspection • Plan Review • Building Code Administration

October 9, 2019

Ms. Robin Palmer
E.I.
Weiler Engineering Company
201 West Marion Avenue, Suite 1306
Punta Gorda, Florida 33950

LOCATIONS:

- Atlanta
- Daytona Beach
- Fort Myers
- Fort Pierce
- Gainesville
- Jacksonville
- Miami
- Ocala
- Orlando (Headquarters)
- Palm Coast
- Panama City
- Pensacola
- Rockledge
- Sarasota
- Tampa
- Tifton
- West Palm Beach

Reference: **LEAD-BASED PAINT SURVEY**
John Pennekamp Coral Reef State Park - Playground
102601 Overseas Highway
Key Largo, Monroe County, Florida 33037
UES Project No. 2140.1900055.0000
UES Report No. 1716272

Dear Ms. Palmer:

On behalf of Weiler Engineering Company (the "client"), Universal Engineering Sciences, Inc. (UES) has completed this Lead-Based Paint (LBP) Survey for the above-referenced property (John Pennekamp Coral Reef State Park - Playground). UES performed this LBP survey on Thursday, October 03, 2019, to identify and assess suspect lead paint on the playground area that may require appropriate removal, handling, and disposal procedures prior to planned demolition at the subject property. The testing of the selected areas was performed in general conformance with the United States Department of Housing and Urban Development Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, (HUD Guidelines) dated June 1995.

A total of 44 readings were taken including 6 for calibration purposes. All tested components were found to be negative for lead-based paint (i.e. 1.0 milligrams of lead per square centimeter (mg/cm²) with 95% confidence) or were below the instruments detection limit. Additional details regarding the ACM Survey conducted by UES are presented in the attached report.

UES appreciates this opportunity to provide environmental services to you and we look forward to future endeavors. If you have any comments or questions regarding the information contained within this report or if we can be of further service, please contact the undersigned.

Respectfully submitted,
Universal Engineering Sciences, Inc.

Written by,

Daniel Infante
Environmental Scientist

Reviewed by,

Robert B. Sport, CIAQP
EPA Certified Lead Paint Risk Assessor
Certification No. FL-R-6414-4
Date: 10/15/19

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	General.....	1
1.2	Purpose and Scope of Work.....	1
1.3	Inspection Procedures	2
2.0	X-RAY FLUORESCENCE (XRF) TESTING	2
2.1	XRF Specification and Testing Protocol.....	2
2.2	XRF Calibrations	2
2.3	XRF Operations	3
3.0	FINDINGS.....	3
3.1	“Positive” XRF Readings	3
3.2	“Negative” XRF Readings	3
4.0	LABORATORY ANALYSIS (PAINT CHIP SAMPLES).....	3
5.0	REGULATORY INFORMATION	4
5.1	EPA Regulations	6
5.1	OSHA Regulations	6
8.0	CONTROLLING AGENCY	7
9.0	CONDITIONS AND LIMITATIONS OF THIS SURVEY.....	7

LIST OF APPENDICES

APPENDIX A

Summary of XRF Results	A
------------------------------	---

APPENDIX B

UES Inspector(s)/Reviewer Certifications	B
--	---

APPENDIX C

Management of Lead-Based Paint Debris Memo	C
--	---

1.0 INTRODUCTION

1.1 General

The purpose of this Lead-Based Paint (LBP) Survey was to identify and assess suspect lead paint on surfaces within the playground area located in the John Pennekamp Coral Reef State Park - Playground at 102601 Overseas Highway in Key Largo, Monroe County, Florida 33037. This service was conducted based on the written authorization of Weiler Engineering Company, dated August 5, 2019. UES understands that the playground is slated for demolition. Lead-Based Paint (LBP), as defined by the United States Department of Housing and Urban Development (HUD), is dried paint film with a lead concentration equal to or greater than 1.0 mg/cm² (milligrams of lead per square centimeter) when measured by a portable X-Ray Fluorescence (XRF) Lead Paint Analyzer, or a lead concentration of 5,000 parts per million (ppm) when analyzed by an American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory (ELLAP), or 0.5 percent by weight when analyzed by an AIHA/ELLAP laboratory. ***This report is not intended for compliance with 40 CFR part 745.***

1.2 Purpose and Scope of Work

The purpose of this study was to perform an evaluation of the above-referenced facility for the presence of LBPs, specifically those playground surfaces/components which may be present or impacted during potential demolition or renovation activities. The activities and procedures used to accomplish this task were as follows:

- 1) Review available information concerning the subject areas including the dates of initial construction, significant renovations, types of construction, and information regarding the on-site structures uses;
- 2) Visual inspection of accessible areas by an inspector to identify, locate, and assess suspect LBP;
- 3) Once identified, measure suspect LBP with a portable XRF Lead Paint Analyzer on all combinations of assessable painted, glazed, shellacked, and/or stained components;
- 4) Due to the size, shape and/or location of some components, XRF readings of these component coatings may not be possible. Typically, collections of paint chip samples from these component coatings are then obtained. Analysis of any collected paint chip samples are performed by an AIHA/ELLAP accredited laboratory using Flame Atomic Absorption (FAA) Environmental Protection Agency (EPA) method SW-846, 3rd edition, 7420 for the presence of lead; and,
- 5) Prepare and submit a report.

Complete destructive observation and sampling procedures were not generally used in UES' evaluation of the subject area, since the playground was occupied. Inaccessible areas within the playground area, such as crawl spaces, inside other sealed areas, behind architectural details are beyond the scope of this study.

The scope of UES' inspection did not include an evaluation of the structure's fixtures, equipment, or stored materials.

1.3 Inspection Procedures

The lead-based paint survey was performed on October 3, 2019, by Mr. Daniel F. Infante, under the supervision of Mr. Rob Sport, an EPA Certified Lead Paint Risk Assessor. A portable Radiation Monitoring Devices, Inc. (RMD) LPA-1 XRF analyzer was used to analyze components for LBP. Mr. Sport is certified by RMD to operate the LPA-1 Analyzer. Refer to **Appendix B** for the certifications.

2.0 X-RAY FLUORESCENCE (XRF) TESTING

2.1 XRF Specification and Testing Protocol

The RMD LPA-1 XRF Analyzer method of measurement is based on spectrometric analysis of lead K-shell XRF within a controlled depth of interrogation. K-shell measurements of lead in paint is the EPA/HUD's preferred method of XRF measurement. The K-Shell line (the higher energy emission) is normally used for paint analysis because it measures lead in all layers of paint films, including those layers nearest the substrate where higher lead levels are often found. K-shell X-rays can penetrate multiple layers of paint and/or various other coatings without being affected by the thickness and composition of the layers. The RMD LPA-1 XRF Analyzer uses a controlled depth concept which restricts the penetration of the energetic K-shell X-rays into the substrate so that the analyzer will not locate objects deep in a wall or component such as lead pipes. The RMD LPA-1 XRF Analyzer distinguishes the lead X-ray from interfering X-ray radiation from other metals. The RMD LPA-1 XRF Analyzer calculates and then displays the specific lead content as milligrams per square centimeter (mg/cm^2) of surface area.

The portable RMD LPA-1 XRF Analyzer was operated in general accordance with the manufacturer's specifications. The testing of the selected areas was performed in general conformance with the United States Department of Housing and Urban Development Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, (HUD Guidelines) dated June 1995.

2.2 XRF Calibrations

The EPA/HUD protocol requires calibration checks on the portable XRF analyzer. The calibration checks are performed at the beginning of the inspection, and/or every four hours, and at the conclusion of the inspection. Calibration checks were performed in order to determine if the instrument was operating properly. Three calibration test measurements lasting a minimum of 32 seconds per measurement are collected on a selected National Institute of Standards and Technology (NIST) lead standard. The average of the three readings are recorded and compared to the known value of the standard provided by the manufacturer. All calibration checks for the portable RMD LPA-1 XRF Analyzer (Serial No. 2050) were within the manufacturer's parameters.

2.3 XRF Operations

The portable RMD LPA-1 XRF Analyzer was operated utilizing the "Quick Mode" (95% confidence) sampling mode with an "action" level of 1.0 mg/cm² as described in the EPA/HUD Guidelines. Each XRF result (K-Shell reading) was categorized as negative or positive. XRF readings equal to or greater than 1.0 mg/cm² are classified as positive. XRF readings less than 1.0 mg/cm² are classified as negative as described in the EPA/HUD Guidelines.

3.0 FINDINGS

A total of 44 XRF readings, including calibrations, were performed at the playground area. Refer to the Summary of XRF Results in **Appendix A** for information pertaining to the locations and results of the XRF readings.

3.1 "Positive" XRF Readings

None of the 41 component coatings tested had XRF readings equal to or greater than the "positive" classification of 1.0 mg/cm².

3.2 "Negative" XRF Readings

Four of the 40 component coatings tested had a XRF reading in the "negative" range of 0.1 mg/cm² to 0.9 mg/cm², which is below the HUD "positive" classification of 1.0 mg/cm².

"Negative" XRF Readings (0.1 mg/cm² to 0.9 mg/cm²)

Reading #	Room/Location	Substrate	Color	Component	Results (mg/cm ²)
10	Swing Set Frame	Metal	Yellow	Column G	0.6
23	Playground	Metal	Brown	Arch Ladder	0.1
24	Playground	Metal	Brown	Arch Ladder	0.4
25	Playground	Metal	Brown	Arch Ladder	0.6

While the components listed in the table above fall within the "negative" range and are not considered lead paint by the EPA; should these colors/components be disturbed, they are subject to regulation by OSHA. The remaining component coatings were documented with XRF readings below the instruments detection limit for lead.

4.0 LABORATORY ANALYSIS (PAINT CHIP SAMPLES)

UES was able to analyze and collect XRF readings from all of the tested surfaces/components during this LBP survey. As such, samples of paint chips were not collected or analyzed during the field inspection as part of this survey.

5.0 REGULATORY INFORMATION

LBP activities are governed by various regulations and guidelines. The regulations and guidelines are focused on the protection of building occupants, protection of the environment, disposal procedures, and worker protection.

The disturbance of LBP coatings is regulated by the Occupational Safety and Health Administration (OSHA), which has noted that the HUD LBP definition may not be applicable to regulations. The OSHA regulation does not define lead content of the coating, but instead, regulates the disturbance of the materials with any lead content.

The demolition of buildings is regulated under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) statute for general dust control. Specifications for the proper work practices, controls and disposal should be developed to document compliance with all applicable regulations.

Specifications for the proper work practices, controls and disposal should be developed to document compliance with all applicable regulations. Those components/colors not tested, or in locations not inventoried in this report, should be tested for lead content prior to any disturbance (repair, renovation, abatement, or demolition) that may cause airborne release of lead. Components/colors that may be identified to contain the presence of lead should not be disturbed in any uncontrolled manner, such as during repair, renovation or demolition. Any disturbance of these materials should only be done by properly trained personnel in a controlled and documented manner.

The disposal of commercial waste materials containing lead from renovation, abatement, and/or demolition is regulated by the Resource Conservation and Recovery Act (RCRA). RCRA requires a waste toxicity characteristic on the waste by using Toxicity Characteristic (TC) Leaching Procedure (TCLP) (40 CFR 261.24). The TCLP extract is analyzed for lead (or other constituents) to determine if it is above or below the allowable TC regulatory threshold, which for lead is 5 parts per million (ppm) (milligrams/liter).

The Florida Department of Environmental Protection (FDEP) issued Memorandum # SWM-21.36 on February 13, 2002 regarding Management of Lead-Based Paint Debris (**Appendix C**). This FDEP memo states the following:

- This memo is intended to give counties guidance on the management of lead-based paint (LBP) debris. LBP debris includes lead-based paint building components plus chips, dust, contaminated soils and sludges generated from lead abatement projects.
- The EPA's Office of Solid Waste issued a memo on July 31, 2000 clarifying that LBP debris from residences, whether generated by the homeowner or by contractors, is considered "household waste" and is thus exempt from regulation as hazardous waste under the Resource Conservation and Recovery Act (RCRA). As such, this material can be disposed of as household waste in a Municipal Solid Waste (MSW) landfill or Waste-to-Energy facility, and is exempt from hazardous

waste testing requirements. This memo also includes several suggested for the proper handling and disposal of LBP debris.

- The Department believes that designing a system that expedites the LBP debris remediation in a cost effective manner, removes the exposure risk that LBP poses to human health, and gets this material into a proper and regulated management system that is protective of the environment is a sound approach that offers more protection and less process. The Department concurs with the EPA's interpretation that LBP debris from a residence (including single family homes, apartment buildings, public housing, and military barracks) is "household waste" and is thus not subject to hazardous waste regulations. LBP debris generated from a commercial or industrial source is not entitled to this same exemption.
- It is the Department's experience that demolition debris which includes wood, concrete, or metal painted with lead based paint will generally not fail a Toxicity Characteristic Leaching Procedure (TCLP) test and so will not be regulated as a hazardous waste. Because of this, the Department will not expect generators of large pieces of LBP debris to characterize the waste stream through testing prior to disposal. Large sized pieces created from demolition jobs should be stored in containers, preferably covered, until ready for disposal in a Class I or III landfill or a C&D disposal facility, provided that the owner or operator is willing to accept them. All demolition contractors and others dealing with LBP debris should check with the facility owner where they intend to dispose of this material.
- Generators of chips, dust, contaminated soils and sludges from commercial or industrial sources which may be contaminated with LBP continue to be responsible for the proper characterization of the waste stream prior to disposal. Such materials generated from renovation or remodeling jobs that can be vacuumed, swept up, or otherwise easily collected should be subjected to the TCLP test. If the materials are determined to be hazardous, they must be managed accordingly. If they are not hazardous, the materials should be placed into plastic bags or similar containers and taken to a class I landfill for proper disposal.
- Dust, paint chips and other small LBP materials from households are not regulated as hazardous waste. Because this material can be "hazardous in nature" even though it may not be regulated as a hazardous waste, the Department does not consider it to be construction and demolition debris, and thus it cannot be disposed of at a Class III landfill or C&D disposal facility. These materials should be placed into plastic bags or similar containers and taken to a Class I landfill for disposal.
- This memo addresses only the disposal aspects of LBP debris. The reader should be aware that other aspects of LBP abatement and management may be regulated by other entities. For example, EPA and HUD have issued health and safety management practices for the handling of this material, which recommends the use of gloves, dust masks, respirators when appropriate, and other Personal Protection Equipment.

Therefore, it has been our past experience that the FDEP and OSHA allows components with lead containing coatings to remain in-place during general demolition provided that wet techniques and/or

other engineering controls are employed during the process. Further, components that have lead containing coatings and debris mixed with lead containing coatings cannot be recycled and must be disposed in an appropriate landfill. With respect to lead related tasks such as any manual demolition of structures, manual scraping, manual sanding, heat gun applications, and power tool cleaning with dust collection systems, OSHA requires employee protective measures until the employer performs an employee exposure assessment and documents that the employee performing any of the lead related tasks is not exposed above the Permissible Exposure Limit (PEL) of 50 micrograms of lead per cubic meter of air ($\mu\text{g}/\text{m}^3$) averaged over an 8-hour period. UES recommends employee exposure monitoring during any lead related tasks.

5.1 EPA Regulations

Residential Lead Based Paint Hazard Reduction Act of 1992, Public Law 102-550: Title X of the Housing & Community Development Act of 1992

Deals with training requirements for managing and procedures for evaluating the risks of identified lead based paint.

40 CFR 745 - Subpart L - Lead-Based Paint Activities

Includes a "Model Accreditation Plan" outlining the training and certification program applicable to personnel performing lead-based paint activities.

40 CFR 745 - Subpart F - Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property

Requires disclosure and an allowance for gathering of information concerning the presence or potential of lead-based paint hazards during a residential property sale.

Resource Conservation & Recovery Act (RCRA)

Deals with the waste and disposal requirements associated with lead based paint materials.

5.1 OSHA Regulations

29 CFR 1926.62, Lead Exposure in Construction: Interim Final Rule

Deals with the potential exposure to lead based paint materials to which construction workers may be subjected.

29 CFR 1910.134: Use of Respirators

The OSHA Respiratory Protection Rule defines the program and requirements as to when personnel are allowed to wear respirators, maintenance of respirators, etc.

In general, OSHA coverage extends to all private sector employer and employees. Those not covered under the standard typically include self-employed persons and federal, state and local municipal employees.

The Office of Public & Indian Housing, Department of Housing & Urban Development Regulation are as follows:

Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1995)

Deals with requirements for testing and managing the potential for lead based paint exposure in public housing, primarily focused to the safety of children.

24 CFR 35 - Subpart H - Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property

Requires disclosure and an allowance for gathering of information concerning the presence or potential of lead-based paint hazards during a residential property sale.

8.0 CONTROLLING AGENCY

The Federal controlling agency is EPA Region 4, Sam Nunn Atlanta Federal Building, 61 Forsyth Street, Atlanta, Georgia 30303, (404) 347-4727.

9.0 CONDITIONS AND LIMITATIONS OF THIS SURVEY

A representative of UES performed the XRF LPB inspection on October 3, 2019. This survey is applicable for the time that the inspection was conducted. Component surface coatings that were not tested by UES should be tested before any disturbance to the components (such as repair, renovation, or demolition). The testing results may not be acceptable for activities (such as renovation and repair) which may disturb the coatings and be regulated by OSHA.

APPENDIX A



UNIVERSAL
ENGINEERING SCIENCES

John Pennekamp Coral Reef State Park - Playground
102601 Overseas Highway
Key Largo, Monroe County, Florida

XRF LEAD-BASED PAINT FORM

Inspection Date: October 3, 2019
UES Project No. 2140.1900055.0000

Reading Number	Room No./Name	Substrate	Color	Paint Condition	Component	Wall	Test Location		XRF Reading	Units	Classification
							Location	Location			
1	Start Calibration								1.0	mg/cm ²	Average
2	Start Calibration								1.0	mg/cm ²	0.9
3	Start Calibration								0.7	mg/cm ²	
4	Swing Set	Metal	Yellow	Fair	Frame		Column A	Top	0.0	mg/cm ²	
5	Swing Set	Metal	Yellow	Fair	Frame		Column B	Middle	-0.1	mg/cm ²	
6	Swing Set	Metal	Yellow	Fair	Frame		Column C	Bottom	-0.1	mg/cm ²	
7	Swing Set	Metal	Yellow	Fair	Frame		Column D	Top	-0.1	mg/cm ²	
8	Swing Set	Metal	Yellow	Fair	Frame		Column E	Middle	0.0	mg/cm ²	
9	Swing Set	Metal	Yellow	Fair	Frame		Column F	Bottom	-0.1	mg/cm ²	
10	Swing Set	Metal	Yellow	Fair	Frame		Column G	Middle	0.6	mg/cm ²	
11	Playground	Metal	Brown	Fair	Column	A	Tower	Top	-0.4	mg/cm ²	
12	Playground	Metal	Brown	Fair	Column	B	Tower	Middle	-0.4	mg/cm ²	
13	Playground	Metal	Brown	Fair	Column	C	Tower	Bottom	-0.4	mg/cm ²	
14	Playground	Metal	Brown	Fair	Column	D	Tower	Top	-0.4	mg/cm ²	
15	Playground	Metal	Brown	Fair	Floor	A	Tower	Middle	-0.1	mg/cm ³	
16	Playground	Metal	Brown	Fair	Tower Steps	A	Center	Middle	-0.2	mg/cm ²	
17	Playground	Metal	Brown	Fair	Handle Rails	A	Tower	Middle	-0.2	mg/cm ²	
18	Playground	Metal	Brown	Fair	Hoop Climber	A	Center	Top	-0.1	mg/cm ²	
19	Playground	Metal	Brown	Fair	Hoop Climber	A	Center	Middle	-0.1	mg/cm ²	
20	Playground	Metal	Brown	Fair	Hoop Climber	A	Center	Bottom	0.0	mg/cm ²	
21	Playground	Metal	Brown	Fair	Play Steps	B	Center	Top	-0.1	mg/cm ²	
22	Playground	Metal	Brown	Fair	Play Steps	B	Center	Middle	0.0	mg/cm ²	
23	Playground	Metal	Brown	Fair	Play Steps	B	Center	Bottom	-0.2	mg/cm ²	
24	Playground	Metal	Brown	Fair	Arch Ladder	C	Center	Top	0.1	mg/cm ²	
25	Playground	Metal	Brown	Fair	Arch Ladder	C	Center	Middle	0.4	mg/cm ²	
26	Playground	Metal	Brown	Fair	Arch Ladder	C	Center	Bottom	0.6	mg/cm ²	

John Pennekamp Coral Reef State Park - Playground
 102601 Overseas Highway
 Key Largo, Monroe County, Florida

XRF LEAD-BASED PAINT FORM

Inspection Date: October 3, 2019
 UES Project No. 2140.1900055.0000

Reading Number	Room No./Name	Substrate	Color	Paint Condition	Component	Wall	Test Location		XRF Reading	Units	Classification
							Location	Location			
27	Playground	Plastic	Yellow	Fair	Canopy	A	Center	Bottom	-0.1	mg/cm ²	
28	Playground	Plastic	Yellow	Fair	Canopy	B	Center	Bottom	-0.5	mg/cm ²	
29	Playground	Plastic	Yellow	Fair	Canopy	C	Center	Bottom	-0.1	mg/cm ²	
30	Playground	Plastic	Yellow	Fair	Canopy	D	Center	Bottom	-0.4	mg/cm ²	
31	Playground	Plastic	White	Fair	Letter Panel	B	Center	Middle	-0.3	mg/cm ²	
32	Playground	Plastic	White	Fair	Number Panel	B	Center	Middle	-0.4	mg/cm ²	
33	Playground	Plastic	White	Fair	House Panel	C	Left	Bottom	-0.2	mg/cm ²	
34	Playground	Plastic	Green	Fair	House Panel	C	Right	Top	-0.2	mg/cm ²	
35	Playground	Plastic	Yellow	Fair	Spiral Slide	D	Center	Middle	-0.3	mg/cm ²	
36	Playground	Plastic	Yellow	Fair	Slide	D	Center	Middle	-0.1	mg/cm ²	
37	Playground	Metal	Brown	Fair	Sliding Pole	D	Center	Middle	-0.5	mg/cm ²	
38	Playground	Metal	Yellow	Fair	Canopy Bracket	A	Center	Middle	-0.1	mg/cm ²	
39	Playground	Metal	Yellow	Fair	Canopy Bracket	B	Center	Middle	-0.3	mg/cm ²	
40	Playground	Metal	Yellow	Fair	Canopy Bracket	C	Center	Middle	-0.1	mg/cm ²	
41	Playground	Metal	Yellow	Fair	Canopy Bracket	D	Center	Middle	0.0	mg/cm ²	

John Pennekamp Coral Reef State Park - Playground
102601 Overseas Highway
Key Largo, Monroe County, Florida

XRF LEAD-BASED PAINT FORM

Inspection Date: October 3, 2019
UES Project No. 2140.1900055.0000

Reading Number	Room No./Name	Substrate	Color	Paint Condition	Component	Wall	Test Location Location Location		XRF Reading	Units	Classification
42	End Calibration								0.9	mg/cm ²	Average
43	End Calibration								1.0	mg/cm ²	0.97
44	End Calibration								1.0	mg/cm ²	

SUMMARY OF RESULTS:

Total Measurements (Including Calibrations):	44
Positive Measurements (1.0 - >9.9 mg/cm2):	0
Negative Measurements (0.1 - 0.9 mg/cm2):	10
Below Detection Limits (BDL):	34

APPENDIX B



UNIVERSAL
ENGINEERING SCIENCES

United States Environmental Protection Agency

This is to certify that



Robert Bryan Sport

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and
Territories

This certification is valid from the date of issuance and expires August 18, 2022

LBP-R-6414-2

Certification #

July 26, 2019

Issued On



Adrienne Priselac, Manager, Toxics Office
Land Division

APPENDIX C



UNIVERSAL
ENGINEERING SCIENCES

Memorandum

Florida Department of Environmental Protection

TO: County Solid Waste Directors
Other Interested Parties

FROM: William W. Hinkley, Chief
Bureau of Solid and Hazardous Waste

DATE: February 13, 2002

SUBJECT: Management of Lead-Based Paint Debris
Memo # SWM-21.36

This memo is intended to give counties guidance on the management of lead-based paint (LBP) debris. LBP debris includes lead-based paint building components plus chips, dust, contaminated soils and sludges generated from lead abatement projects.

The EPA's Office of Solid Waste issued a memo on July 31, 2000 clarifying that LBP debris from residences, whether generated by the homeowner or by contractors, is considered "household waste" and is thus exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA). As such, this material can be disposed of as household waste in a Municipal Solid Waste (MSW) landfill or Waste-to-Energy facility, and is exempt from hazardous waste testing requirements. This memo also included several suggested BMPs for the proper handling and disposal of LBP debris.

The Department believes that designing a system that expedites LBP debris remediation in a cost effective matter, removes the exposure risk that LBP poses to human health, and gets this material into a proper and regulated management system that is protective of the environment is a sound approach that offers more protection and less process. The Department concurs with the EPA's interpretation that LBP debris from a residence (including single family homes, apartment buildings, public housing, and military barracks) is "household waste" and is thus not subject to hazardous waste regulations. LBP debris generated from a commercial or industrial source is not entitled to this same exemption.

It is the Department's experience that demolition debris which includes wood, concrete, or metal painted with lead based paint will generally not fail the Toxicity Characteristic Leaching Procedure (TCLP) test and so will not be regulated as a hazardous waste. Because of this, the Department will not expect generators of large pieces of LBP debris to characterize the waste stream through testing prior to disposal. Large sized pieces of debris created from demolition jobs should be stored in containers, preferably covered, until ready for disposal in a Class I or III landfill or a C&D disposal facility, provided that the owner or operator is willing to accept them. All demolition contractors and others dealing with LBP debris should check with the facility owner where they intend to dispose of this material.

Generators of chips, dust, contaminated soils and sludges from commercial or industrial sources which may be contaminated with LBP continue to be responsible for the proper characterization of the waste stream prior to disposal. Such materials generated from renovation or remodeling jobs that can be vacuumed, swept up, or otherwise easily collected should be subjected to the TCLP test. If the materials are determined to be hazardous, they must be managed accordingly. If they are not hazardous, the materials should be placed into plastic bags or similar containers and taken to a Class I landfill for disposal.

Dust, paint chips and other small LBP materials from households are not regulated as hazardous waste. Because this material can be "hazardous in nature" even though it may not be regulated as a hazardous waste, the Department does not consider it to be construction and demolition debris, and thus it cannot be disposed of at a Class III landfill or C&D disposal facility. These materials should be placed into plastic bags or similar containers and taken to a Class I landfill for disposal.

This memo addresses only the disposal aspects of LBP debris. The reader should be aware that other aspects of LBP abatement and management may be regulated by other entities. For example, EPA and HUD have issued health and safety management practices for the handling of this material, which recommend the use of gloves, dust masks, respirators when appropriate, and other Personal Protection Equipment.

CC: District Waste Program Administrators
Satish Kastury
Chris McGuire
Richard Tedder