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PRE- RENOVATION LIMITED ASBESTOS SURVEY
Peninsula Club Structure
415 S. Peninsula Drive
Daytona Beach, Florida

UES Project No. 0440.1800113.0000
UES Report No. 134324A

Date: February 12, 2019
(Revised 2-15-19)

Prepared for:

City of Daytona Beach
Technical Services Division
950 Bellevue Avenue
Daytona Beach, Florida 32114

Prepared by:

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February 12, 2019

Mr. Joe Piper, Project Manager
City of Daytona Beach
Technical Services Division
950 Bellevue Avenue
Daytona Beach, Florida 32114

Reference: **PRE - RENOVATION LIMITED ASBESTOS SURVEY**
Peninsula Club Structure
415 S. Peninsula Drive
Daytona Beach, Florida
UES Project No. 0440.1800113.0000 and Report No. 134324A

Dear Mr. Piper:

Universal Engineering Sciences (UES) is pleased to submit the enclosed report for the asbestos containing materials survey at the above referenced site during January, 2019.

Universal Engineering Sciences appreciates the opportunity to provide you with our services on this project and we look forward to working with you in the future. Should you have any questions about this report please contact our office at 386-756-1105.

Respectfully submitted,

UNIVERSAL ENGINEERING SCIENCES

Richard LaRocca
Certified Asbestos Inspector
Certification No. 10349

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RL:LNW

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1.0 INTRODUCTION

1.1 GENERAL

In this report, UES presents the results of the suspected Asbestos Containing Material (ACM) Evaluation performed on the Peninsula Club structure located at 415 S. Peninsula Drive located in Daytona Beach, Florida (hereinafter "site"). This service was conducted as approved per the issuance of Purchase Order # 0000014597 for UES Proposal No. 18D-1147R. This service was performed as a standard priority assessment.

1.2 PURPOSE AND SCOPE

The purpose of this study was to perform an evaluation of the structure currently present on the site for the presence of Asbestos Containing Materials (ACMs).

The activities and procedures used to accomplish this task were as follows:

1. Review available information concerning the structure including the type and age of original construction

2. Walk through and observe accessible areas of the structure to identify, locate, and assess suspected ACM.

3. Obtain samples of each suspected ACM.

4. Analyze the collected samples using polarized light microscopy (PLM) for the presence of asbestos fibers.

5. Prepare and submit a report of our findings.

Complete destructive observation and sampling procedures were generally not used in our evaluation of the structure. Inaccessible areas within the structure such as inside partitions, walls, or other sealed areas were not completely evaluated as part of this study. The scope of our investigation did not include an evaluation of fixtures, equipment, or stored materials. **This survey was performed for window renovations only. Any other materials not associated with window openings or frames (roofing, flooring, ceiling areas, etc.) are not included as a part of this survey.**

2.0 BUILDING CHARACTERISTICS AND INFORMATION

2.1 GENERAL

The subject property was developed with one structure comprised of concrete masonry products and wood framing construction. The structure was constructed in the 1940's (which consistent with information obtained from the Volusia County Property Appraiser). The structure had a multiple entrance areas, two restrooms, dining areas, kitchen areas, stage, balcony area and a storage rooms. Building materials observed and associated with windows included plaster/stucco (interior and exterior), wood frames, drywall with joint compound (some areas) and sealants (glazing and caulking).

2.2 MECHANICAL SYSTEMS

The structure located at the site is classified as commercial and operated multiple HVAC systems providing climate control for the structure.

2.3 AVAILABLE MATERIAL INFORMATION

UES was not provided with any information about the structure at the subject property.

2.4 BUILDING USE

The structure was currently occupied and operated as an event hall.

3.0 BUILDING INSPECTION

3.1 GENERAL

Three forms of asbestos containing materials are typically found in buildings: (1) sprayed-on or troweled-on surfacing materials; (2) thermal insulation on pipes, boilers, and ducts; and (3) miscellaneous materials such as wall board, ceiling tiles, sealants, shingles, mastics/cements and floor tiles. A walk-through inspection was conducted on January 3, 2019, to identify these and other materials present that would be associated with the window renovations for the structure which are typically suspected of containing ACMs. During the survey,

UES collected suspect ACM samples from the interior and exterior wall surfaces adjacent to the windows and the window frame (caulking/sealants and/or glazing) materials of the onsite structure.

3.2 INSPECTION PROCEDURES

The field inspection was performed by a UES inspector accredited according to Federal Regulation 40 CFR, Part 763 (AHERA), under the direction of a UES asbestos consultant licensed in the State of Florida. After a preliminary walk-through of the building, an inspection was conducted to evaluate the location and extent of the suspected ACMs associated with the window renovation areas. Once identified, the suspect ACM was categorized into homogeneous areas containing materials of the same type, age, visual appearance, texture, composition, etc. Random, and in some cases, judgmental samples of each homogeneous area suspect ACMs were then collected. The physical condition and potential for disturbance and damage of each ACM was assessed. In addition, a tactile inspection was performed to evaluate friability. (If the material, when dry can be crumbled, pulverized or reduced to powder by hand pressure, it is considered friable).

3.3 SUSPECTED ASBESTOS CONTAINING BUILDING MATERIALS

Based on our review of the available building information and visual survey of the building, we identified 4 homogeneous materials as suspected ACMs associated with the window frame areas. Table 1 presents a summary of suspected ACMs.

TABLE 1

Homogeneous Material No.	Sample Numbers	Material Description	Material Location
1	PC-1 A,B,C,D,E	White/Gray Plaster	Walls – Most Areas (Interior)
2	PC-2 A,B	Gray Drywall w/ White Joint Compound	Walls – Some (Interior)
3	PC-3 A,B,C,D,E,F	Tan/Gray Textured Plaster/Stucco	Walls Exterior Surface
4	PC-4 A,B,C,D,E	Tan/Gray Glazing/Caulking	Windows - Most

4.0 LABORATORY ANALYSIS AND RESULTS

4.1 BULK SAMPLES

The samples of the suspected ACMs collected during the field inspection were transported with chain-of-custody documents to EMSL Analytical, Inc. Laboratories, Orlando, Florida. EMSL is a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for bulk sample analysis. The samples were analyzed for the presence of asbestos using Polarized Light Microscopy (PLM). The analyses were performed according to EPA Method 600/R-93/116, July 1993. A copy of the laboratory report is included in Appendix B of this report.

4.2 POINT COUNT

One suspect material was point counted as part of this survey following the initial laboratory analysis. Samples PC-3B, PC-3C, PC-3D, PC-3E and PC-3F (tan/gray texture plaster/stucco on the exterior walls of the structure) was found to contain <1% Chrysotile (a common form of asbestos found in some materials) as a constituent. Please see below in the findings section for the "point count" analysis.

5.0 FINDINGS

5.1 GENERAL

The laboratory analysis detected asbestos in excess of one percent in one (1) of the four (4) suspected ACMs identified during our investigation. ACMs are those materials which contain one percent or greater asbestos as a constituent.

The tan/white glazing/caulking associated with window frame glass was found to contain 2% Chrysotile as a constituent. This material was found in majority of window frames on the forst and second floor areas of the structure and was found to be in poor condition. This material is considered to be a Category I Non-Friable Material.

Additionally, the tan/gray texture plaster/stucco was found to contain <1% Chrysotile according to initial laboratory analysis. Based on this information, UES submitted (at the clients request) samples for 400 Point Count analysis to confirm and/or clarify the measurement of the asbestos content within this material. Based on this analysis, samples were found to contain 0.25% Chysotile as a constituent. This material was found to be in good condition at the time of the

survey and was located on the exterior wall surfaces of the structure. This material is considered to be Category II Non-Friable according to the current NESHAPS regulations.

The NESHAPS Category I ACM is classified as the following: resilient/pliable roofing, flooring, packing, and gaskets, and other materials that are pliable and not likely to become friable.

6.0 SUMMARY

Inspection of the municipal structure located at 415 S. Peninsula Drive, Daytona Beach, Florida, identified four (4) different materials suspected of containing asbestos fibers. Bulk samples of each of those materials were collected and submitted to a NVLAP accredited laboratory for analysis. The results indicated that one (1) of the suspect materials contained asbestos fibers in excess of one percent. Please see the Findings section for more detailed information regarding these ACMs mentioned above.

Materials that contain less than one percent asbestos (the texture plaster/stucco located on exterior wall surfaces containing <1% Chrysotile) are still regulated to some extent under OSHA's Construction Industry Standard. Therefore, anyone who may perform work on the structure (such as remodeling, construction, maintenance or demolition activities) should familiarize him or herself with these standards if these are not already common knowledge. Included in Appendix "B" are some interpretive memos from OSHA which discuss the regulatory requirements for these materials in more detail.

7.0 REGULATORY INFORMATION

There are federal and state statutes and regulations which govern the abatement and disposal of ACM's. The renovation and demolition of buildings containing ACMs is regulated under the National Emission Standard for Hazardous Airborne Pollutants (NESHAP) statute. The NESHAP regulations require notification to the controlling agency and removal of all regulated asbestos containing materials (RACMs) prior to renovation or demolition. RACMs are defined as (1) friable asbestos material, (2) Category I non-friable asbestos containing material that has become friable (3) Category I non-friable asbestos containing material that will be or has been subjected to sanding, grinding, cutting, or abrading, or (4) Category II non-friable asbestos containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition operations regulated by the NESHAP. We recommend that you contact the Controlling Agency prior to renovation or demolition regarding the proper disposition of the ACMs. It is important to note that even though an activity may be exempt from

the EPA NESHAP regulations; such exemption does not extend to other state and federal statutes.

Demolition activities in buildings that contain ACMs or presumed asbestos containing materials (PACM) are regulated under the OSHA Asbestos Construction Standard (29 CFR 1926.1101). The OSHA standard requires the building owner to inform their employees who will work in or adjacent to areas containing ACMs or PACMs, perspective employers applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing ACMs or PACMs, all employers of employees on multi-employer work sites who will be performing work with or adjacent to areas containing asbestos, and tenants who will occupy areas containing ACMs or PACMs, of the presence, location, and quantity of ACMs or PACMs at the work sites in their buildings and facilities.

Renovation or demolition activities of the structure located within the subject property should be conducted in strict compliance with the aforementioned federal statutes and other applicable regulations, and good health practices. All procedures, methods and documentation should be accomplished by and be the responsibility of appropriately licensed professionals (asbestos consultants and contractors). Any material Identified as non-friable ACM must be treated as friable ACM when the material is about to become friable as a result of activities performed within the building.

Demolition under NESHAP is defined as the wrecking or taking out of any load supporting member of a facility together with any related handling operations.

If the category I materials will be subjected to sanding, grinding, cutting, or abrading during demolition activities, they would become regulated materials and would require abatement prior to the renovation process. Florida State Statutes do not require a licensed abatement contractor to remove Category I, non-friable flooring or roofing materials; however, a certified roof or flooring contractor, specific personnel, training and procedures are required for the removal and handling of these materials. OSHA regulations would be applicable for all activities associated with the asbestos containing materials.

8.0 CONTROLLING AGENCIES

The controlling agency for the coordination of projects involving asbestos removal or demolition for Volusia County is the Florida Department of Environmental Protection Central District Office, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767, Ms. Wanda Parker Garvin. FDEP Central District asbestos division can be contacted by telephone number (407) 897-4100.

9.0 CONDITIONS AND LIMITATIONS OF THIS STUDY

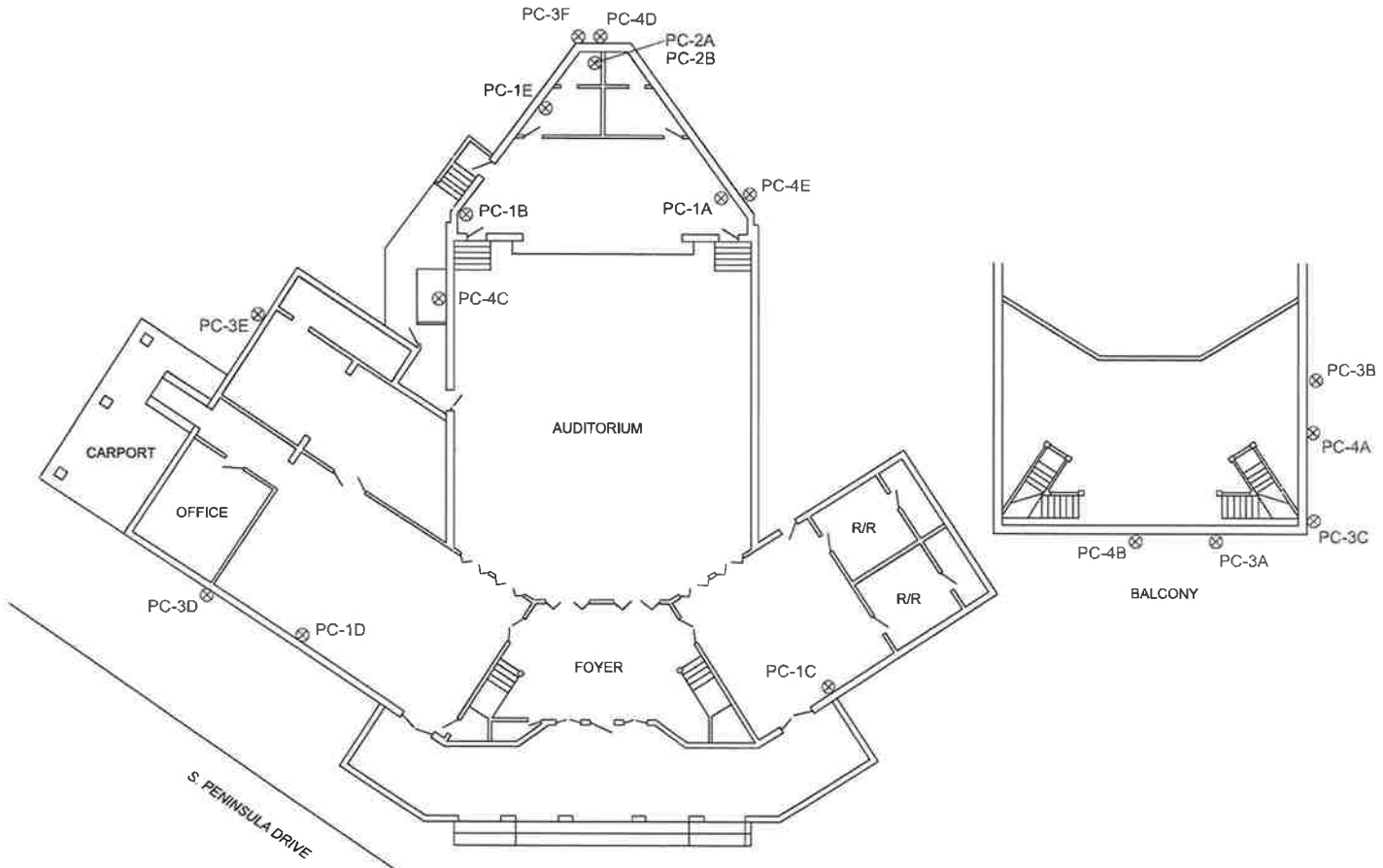
UES obtained samples of the suspect materials which were observed during a walk-through of the structure located on the site that are typically suspected ACMs. The bulk samples were submitted to an NVLAP-approved laboratory for analysis using EPA approved methods or industry accepted standards. No other warranty is expressed or implied.

In general, nondestructive inspection and sampling procedures were incorporated which allowed assessment of reasonably suspected ACMs. Any suspected ACMs not addressed in this report which are encountered during renovations/demolition should be assessed for asbestos content prior to being damaged or removed. Building equipment fixtures or stored materials were not inspected or sampled as part of this evaluation. The indicated material quantities, if any, are approximate and should be considered preliminary in nature.

Analysis of floor tiles and other resinously bound materials by EPA Method 600R-93/116 July, 1993, may yield false-negative results because of method limitations in separating closely bound fibers and in detecting fibers of small length and diameter. Should you desire, other analytical methods including Transmission Electron Microscopy can be used to further evaluate these types of materials.

Appendix A

Bulk Sample Location Map



LEGEND

PC-xx ⊗ APPROXIMATE LOCATION OF ASBESTOS SAMPLE

PC-xx ⊗ APPROXIMATE LOCATION OF ASBESTOS SAMPLE (ROOF)

UNIVERSAL ENGINEERING SCIENCES

PROJECT:

PRE RENOVATION ASBESTOS AND LEAD BASED PAINT
415 S. PENINSULA DRIVE
DAYTONA BEACH, FLORIDA

TITLE:

SAMPLING LOCATION PLAN
ASBESTOS

DRAWN BY:	ML	DATE: 01/23/19	PROJECT NO.: 0440.1800113.0000	SCALE: 1" = 5'	PAGE/FIG. NO.: A-1
CHECKED BY:	RL	DATE: 01/23/19	REPORT NO.: 134324		

Appendix B

Laboratory Analysis Report (PLM)

EMSL Analytical, Inc.
3303 PARKWAY CENTER COURT Orlando, FL 32808
Tel/Fax: (407) 599-5887 / (407) 599-9063
http://www.EMSL.com / orlandolab@emsl.com

EMSL Order: 341900395
Customer ID: UESO53
Customer PO:
Project ID:

Attention: Richard LaRocca
Universal Engineering Sciences
911 Beville Road
Suite 3
South Daytona, FI 32119
Project: Pre-Renovation Asbestos + LBP

Phone: (386) 756-1105
Fax: (386) 760-4067
Received Date: 01/07/2019 9:45 AM
Analysis Date: 01/09/2019 - 01/10/2019
Collected Date: 01/03/2019

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
PC-1A-Skim Coat *341900395-0001*	Walls-Most East S. East - White/Gray Plaster	White Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-1A-Base Coat *341900395-0001A*	Walls-Most East S. East - White/Gray Plaster	Tan Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-1B-Skim Coat *341900395-0002*	Walls-Most North Side - White/Gray Plaster	White Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-1B-Base Coat *341900395-0002A*	Walls-Most North Side - White/Gray Plaster	Tan Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-1C *341900395-0003*	Walls-Most West Windows - White/Gray Plaster	Beige Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-1D-Skim Coat *341900395-0004*	Walls-Most - White/Gray Plaster	White Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-1D-Base Coat *341900395-0004A*	Walls-Most - White/Gray Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-1E *341900395-0005*	Walls-North East - White Plaster	White Non-Fibrous Homogeneous		20% Quartz 15% Ca Carbonate 65% Non-fibrous (Other)	None Detected
PC-2A-Drywall *341900395-0006*	Walls-Former Restroom - Gray Drywall w/Joint Compound	Brown Fibrous Heterogeneous	10% Cellulose	65% Gypsum 25% Non-fibrous (Other)	None Detected
PC-2A-Joint Compound *341900395-0006A*	Walls-Former Restroom - Gray Drywall w/Joint Compound	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
PC-2B-Drywall *341900395-0007*	Walls-Former Restroom - Gray Drywall w/Joint Compound	Brown Fibrous Heterogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-2B-Joint Compound *341900395-0007A*	Walls-Former Restroom - Gray Drywall w/Joint Compound	White Non-Fibrous Homogeneous		2% Quartz 15% Ca Carbonate 83% Non-fibrous (Other)	None Detected
PC-3A *341900395-0008*	Exterior-Walls (West) - Tan/Gray Tecture Plaster/Stucco				Not Submitted
PC-3B-Texture *341900395-0009*	Exterior-Walls South - Tan/Gray Tecture Plaster/Stucco	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	<1% Chrysotile
PC-3B-Stucco *341900395-0009A*	Exterior-Walls South - Tan/Gray Tecture Plaster/Stucco	Gray Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected

Initial report from: 01/10/2019 09:33:39

EMSL Analytical, Inc.
3303 PARKWAY CENTER COURT Orlando, FL 32808
Tel/Fax: (407) 599-5887 / (407) 599-9063
http://www.EMSL.com / orlandolab@emsl.com

EMSL Order:	341900395
Customer ID:	UESO53
Customer PO:	
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
PC-3C-Texture *341900395-0010*	Exterior-Walls Southwest - Tan/Gray Tecture Plaster/Stucco	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	<1% Chrysotile
PC-3C-Stucco *341900395-0010A*	Exterior-Walls Southwest - Tan/Gray Tecture Plaster/Stucco	Gray Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-3D-Texture *341900395-0011*	Exterior Walls-North West - Tan/Gray Tecture Plaster	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	<1% Chrysotile
PC-3D-Stucco *341900395-0011A*	Exterior Walls-North West - Tan/Gray Tecture Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-3E-Texture *341900395-0012*	Exterior Walls North - Tan/Gray Tecture Plaster	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	<1% Chrysotile
PC-3E-Skim Coat *341900395-0012A*	Exterior Walls North - Tan/Gray Tecture Plaster	White Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-3E-Base Coat *341900395-0012B*	Exterior Walls North - Tan/Gray Tecture Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-3F-Texture *341900395-0013*	Walls-Most North East - Tan/Gray Tecture Plaster	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	<1% Chrysotile
PC-3F-Skim Coat *341900395-0013A*	Walls-Most North East - Tan/Gray Tecture Plaster	White Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-3F-Base Coat *341900395-0013B*	Walls-Most North East - Tan/Gray Tecture Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (Other)	None Detected
PC-4A *341900395-0014*	Windows-South - Tan/Gray Glazing/Caulking	Gray Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
PC-4B *341900395-0015*	Windows-South West - Tan/Gray Glazing/Caulking	Tan/White Non-Fibrous Homogeneous		15% Ca Carbonate 83% Non-fibrous (Other)	2% Chrysotile
PC-4C *341900395-0016*	Windows- 1st Floor North Side - Tan/Gray Glazing/Caulking	Tan/White Non-Fibrous Homogeneous		15% Ca Carbonate 83% Non-fibrous (Other)	2% Chrysotile
PC-4D *341900395-0017*	Windows North East - Tan/Gray Glazing/Caulking	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
PC-4E *341900395-0018*	Windows East - Tan/Gray Glazing/Caulking	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	<1% Chrysotile

Initial report from: 01/10/2019 09:33:39

EMSL Analytical, Inc.
3303 PARKWAY CENTER COURT Orlando, FL 32808
Tel/Fax: (407) 599-5887 / (407) 599-9063
http://www.EMSL.com / orlandolab@emsl.com

EMSL Order:	341900395
Customer ID:	UESO53
Customer PO:	
Project ID:	

Analyst(s)
Jessicka Lopez (29)

Carlos Rivadeneyra, Laboratory Director
or Other Approved Signatory

Initial report from: 01/10/2019 09:33:39

EMSL Analytical, Inc.
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EMSL Order: 341900395
Customer ID: UESO53
Customer PO:
Project ID:

Attention: Richard LaRocca
Universal Engineering Sciences
911 Beville Road
Suite 3
South Daytona, Fl 32119
Project: Pre-Renovation Asbestos + LBP

Phone: (386) 756-1105
Fax: (386) 760-4067
Received: 01/07/2019 9:45 AM
Analysis Date: 02/08/2019
Collected: 01/03/2019

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
PC-3B-Texture *341900395-0009*	Exterior-Walls South - Tan/Gray Tecture Plaster/Stucco	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<0.25% Chrysotile**
PC-3C-Texture *341900395-0010*	Exterior-Walls Southwest - Tan/Gray Tecture Plaster/Stucco	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<0.25% Chrysotile**
PC-3D-Texture *341900395-0011*	Exterior Walls-North West - Tan/Gray Tecture Plaster	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<0.25% Chrysotile**
PC-3E-Texture *341900395-0012*	Exterior Walls North - Tan/Gray Tecture Plaster	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<0.25% Chrysotile**
PC-3F-Texture *341900395-0013*	Walls-Most North East - Tan/Gray Tecture Plaster	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**<0.25% Chrysotile**

Analyst(s)
Carlos Rivadeneyra (5)

Carlos Rivadeneyra, Laboratory Director
or other approved signatory

Initial report from: 02/08/2019 12:32:32

Universal Engineering Sciences, Inc, Daytona Branch

ASBESTOS CONTAINING MATERIALS CHAIN-OF-CUSTODY

OrderID: 341900395

341900395

Client: UNIVERSAL ENGINEERING SCIENCES

Project: PRE-RENOVATION ASBESTOS + LBP

Location: 415 S. PENINSULA DRIVE - DAYTONA BEACH

Special Instructions/Notes: RLAROCCA@UNIVERSALENGINEERING.COM

Project No.:

Analysis Method: PLM-Asbestos

Page: 1 of 2

Collected By: RLAROCCA

Date Collected: 1-3-19

Turn Around Time: 3-DAY TAT

Batch No:

Sample Number	HSA	Sample Description	Material Type (S,TSI,M)	Sample Location	Material Condition G	Material Condition D	Material Condition SD	Disturbance Potential L	Disturbance Potential M	Disturbance Potential H	Friable Yes	Friable No	Estimated Quantity
PC-1A		WHITE/GRAY PLASTER		WALLS - MOST EAST SIDE	X	X				X		X	
PC-1B		↓		↓ NORTH SIDE	X	X				X		X	
PC-1C		↓		↓ WEST WINDOWS	X	X				X		X	
PC-1D		↓		↓	X	X				X		X	
PC-1E		WHITE PLASTER		WALLS - NORTH EAST	X	X				X		X	
PC-2A		GRAY DRYWALL W/ JOINT COMPOUND		WALLS - FORMER RESTROOM	X	X				X	X	X	
PC-2B		↓		↓	X	X				X	X	X	
PC-3A		TAN/GRAY TEXTURE PLASTER/STUCCO		EXTERIOR - WALLS (WEST)	X					X		X	
PC-3B		↓		↓ SOUTH	X					X		X	
PC-3C		↓		↓ SOUTHWEST	X					X		X	

(HSA = Homogeneous Sampling Area) (S = Surfacing, TSI = Thermal Systems Insulation, M = Miscellaneous) (G = Good, D = Damaged, SD = Significantly Damaged) (L = Low, M = Medium, H = High)

Relinquished By: [signature] Date: 1-4-19 Time: 13:40

Received By: [signature] Date: 1/7/19 Time: 9:45

Universal Engineering Sciences, Inc, Daytona Branch

ASBESTOS CONTAINING MATERIALS CHAIN-OF-CUSTODY

OrderID: 341900395

341 900 395

Page: 2 of 2

Client: UNIVERSAL ENGINEERING SCIENCES

Project No.:

Collected By: RLAROCCA

Project: PRE-RENOVATION ASBESTOS + LBP

Analysis Method: PLM-Asbestos

Date Collected: 1-3-19

Location: 415 S. PENINSULA DRIVE - DAYTONA BEACH

Turn Around Time: 3-DAY TAT

Special Instructions/Notes: RLAROCCA@UNIVERSALENGINEERING.COM

Batch No:

Sample Number	HSA	Sample Description	Material Type (S, TSI, M)	Sample Location	Material Condition G	Material Condition D	Material Condition SD	Disturbance Potential L	Disturbance Potential M	Disturbance Potential H	Friable Yes	Friable No	Estimated Quantity
PC-3D		TAN/GRAY TEXTURE PLASTER		EXTERIOR WALLS - NORTH WEST	X					X		X	
PC-3E		↓		↓ NORTH	X					X		X	
PC-3F		↓		↓ NORTH EAST	X					X		X	
PC-4A		TAN/GRAY GLAZING/CAULKING		WINDOWS - SOUTH		X	X			X	X	X	
PC-4B		↓		- SOUTH WEST		X	X			X	X	X	
PC-4C		↓		- 1ST FLOOR NORTH SIDE		X	X			X	X	X	
PC-4D		↓		↓ NORTH EAST		X	X			X	X	X	
PC-4E		TAN/GRAY GLAZING/CAULKING		WINDOWS - EAST		X	X			X	X	X	

(HSA = Homogeneous Sampling Area) (S = Surfacing, TSI = Thermal Systems Insulation, M = Miscellaneous) (G = Good, D = Damaged, SD = Significantly Damaged) (L = Low, M = Medium, H = High)

Relinquished By: [signature] Date: 1-4-19 Time: 13:40

Received By: Date: Time:

Standard Interpretations

11/24/2003 - Compliance requirements for renovation work involving material containing less than 1% asbestos.

Standard Interpretations - Table of Contents

- **Standard Number:** 1926.1101; 1926.1101(e); 1926.1101(f)(2); 1926.1101(f)(5); 1926.1101(f)(6); 1926.1101(g)(1); 1926.1101(g)(3); 1926.1101(g)(8)(ii); 1926.1101(k); 1926.1101(k)(7); 1926.1101(k)(8); 1926.1101(l)(1); 1926.1101(n)(2)

November 24, 2003

Kurt Varga, Ph.D.
The InService Training Network
6813 Flags Center Drive
Columbus, OH 43229

Dear Dr. Varga:

Thank you for your April 18, 2002 letter to the Occupational Safety and Health Administration (OSHA). Your letter was forwarded to the Directorate of Enforcement Programs for a response. You are writing on behalf of the Ohio School Facilities Commission, which deals with the construction of schools in Ohio. As a preliminary matter, it should be noted that the Commission, as an agency of a state, and the public schools, as entities of political subdivisions of a state, are not subject to the Occupational Safety and Health Act of 1970. See 29 U.S.C. Sec. 652(b)(5). However, in light of your concerns about the costs imposed on school building contractors of complying with the asbestos standard, we are answering your questions. You have questions concerning the OSHA requirements covering the renovation of school buildings that have hard plaster containing some asbestos, but the amount is not more than 1%. This letter constitutes OSHA's interpretation only of the requirements discussed and may not be applicable to any question not delineated within your original correspondence. We apologize for the long delay of this response; our replies to your paraphrased questions are provided below.

Question 1: Are the OSHA letters dated April 17, 1997; August 7, 1998; and August 13, 1999 correct? They all say that items that do not contain >1% asbestos are covered to at least some extent by the Construction Asbestos Standard.

Reply: Yes, those letters are correct although some requirements of the Construction Asbestos Standard, 29 CFR 1926.1101 were not addressed. 29 CFR 1926.1101 would apply even if neither asbestos permissible exposure limit (PEL) is exceeded[1]. The standard contains numerous work practice requirements and prohibitions which apply, regardless of the exposure levels. However, only two of the requirements and three of the prohibitions must be observed in the case of work activities involving installed construction materials that do not contain >1% asbestos. Those work practice requirements and prohibitions that must be observed regardless of the exposure levels and of the percentage of asbestos in the installed construction materials are:

- 29 CFR 1926.1101(g)(1)(ii), which requires: **wet methods, or wetting agents, to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup, except where employers demonstrate that the use of wet methods is infeasible due to, for example, the creation of electrical hazards, equipment malfunction, and, in roofing, except as provided in paragraph (g)(8)(ii)[2] of this section;**
- 29 CFR 1926.1101(g)(1)(iii), which requires: **prompt clean-up and disposal of wastes and debris contaminated with asbestos in leak-tight containers except in roofing operations, where the procedures specified in paragraph (g)(8)(ii)[3] of this section apply;**
- 29 CFR 1926.1101(g)(3)(i), which prohibits: **high-speed abrasive disc saws that are not equipped with point-of-cut ventilator or enclosures with HEPA filtered exhaust air;**
- 29 CFR 1926.1101(g)(3)(ii), which prohibits: **compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air;** and
- 29 CFR 1926.1101(g)(3)(iv), which prohibits: **employee rotation as a means of reducing employee exposure to asbestos.**

There are also some other provisions that apply to work activities involving installed construction materials even where the material does not contain >1% asbestos. However, if neither asbestos PEL is exceeded, only the following few provisions apply:

- 29 CFR 1926.1101(f)(2)(i), the provision for establishing that neither asbestos PEL is exceeded: **Each employer who has a workplace or work operation covered by this standard shall ensure that a "competent person" conducts an exposure assessment immediately before or at the initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with requirements which are triggered by exposure data or the lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly;**
- 29 CFR 1926.1101(f)(6)(I), a provision covering the observation of monitoring: **The employer shall provide affected employees and their designated representatives an opportunity to observe any monitoring of employee exposure to asbestos conducted in accordance with this section;**
- 29 CFR 1926.1101(f)(5)(i), a provision covering employee notification of monitoring results: **The employer shall notify affected employees of the monitoring results that represent that employee's exposure as soon as possible following receipt of monitoring results;**
- 29 CFR 1926.1101(f)(5)(ii), another provision covering employee notification of monitoring results: **The employer shall notify affected employees of the results of monitoring representing the employee's exposure in writing either individually or by posting at a centrally located place that is accessible to affected employees;** and
- 29 CFR 1926.1101(n)(2)(i)-(iii), a set of provisions covering recordkeeping for measurements of exposures to airborne asbestos.

There are numerous additional provisions of the standard that apply to work activities involving installed construction materials even where the material does not contain >1% asbestos if at least one of the asbestos PELs is exceeded.

Question 2: Did OSHA intend to regulate material that is found to contain asbestos at <1% when it promulgated the Construction Asbestos Standard that it issued in 1994?

Reply: Yes. Instead of making all of the engineering controls and work practices applicable

to all materials containing asbestos, OSHA made most of them applicable only to installed building materials that contain >1% asbestos and assigned the term "asbestos-containing material" (ACM) to those materials. However, to prevent needless worker exposures to asbestos, OSHA made a few common-sense work practices and prohibitions applicable if any asbestos is present in materials.

Thus, the current standard contains engineering controls and work practices that apply regardless of the exposure levels to certain work activities involving only installed building materials that meet the definition of ACM. It also contains a few work practices and prohibitions for work involving material that contains any amount of asbestos regardless of the exposure levels. And the standard has exposure-based requirements, consisting of a 0.1 fiber/cc 8-hour TWA PEL and a 1 fiber/cc 30-minute excursion limit, and other requirements that apply whenever worker exposures exceed either or both of the limits, regardless of the amount of asbestos contained in the materials involved.

Question 3: If OSHA had intended to regulate material with <1% asbestos, why aren't we required to communicate information about material with <1% asbestos?

Reply: Most of the requirements for communication of information occur under 29 CFR 1910.1101(k), *Communication of Hazards*. Any of the requirements which apply only to building or facility owners are inapplicable because the buildings are entities of political subdivisions of the State of Ohio and not subject to the OSHAct. On the other hand, any of the provisions that apply to employers are applicable to private contractors doing the asbestos work. The information that sections (k)(7), (9), and (10) require to be communicated applies to materials not having >1% asbestos which are the source of employee asbestos exposures exceeding one or both of the asbestos PELs as well as to materials containing >1% asbestos. Also, 29 CFR 1926.1101(k)(8), which specifies labeling requirements, applies to materials that contain 1% or more asbestos. On the other hand, it is correct that the information which (k)(1)[4]-(k)(6) require to be communicated pertains only to materials containing >1% asbestos. However, it should be noted that under (k), surfacing material, thermal system insulation and asphalt and vinyl flooring material found in buildings constructed no later than 1980 or installed no later than 1980 must be considered to contain >1% asbestos, unless the employer demonstrates otherwise in accordance with (k)(5).

Question 4: Under 29 CFR 1926.1101(k)(8) are employers required only to communicate information about ACM?

Reply: 29 CFR 1926.1101(k)(8) requires employers to communicate information about ACM and also material that contains 1% asbestos. (ACM, again, is material that contains >1% asbestos.)

Question 5: Should the phrase "products containing asbestos" as used in paragraph (k)(8)(i) be read "ACM" and not as including materials with <1% asbestos, because otherwise there is a contradiction in (k)(8)?

Reply: No. There is no contradiction. Paragraph (k)(8)(i) deals broadly with products containing asbestos. Paragraph (k)(8)(vi)(B) provides for an exclusion from labeling for products with <1% concentrations of asbestos.

Question 6: Why, if material containing <1% asbestos is to be considered hazardous (employers are to wet it, put it in containers, and perform air monitoring), are employers not required to warn workers about its presence when they know it is present at a work site or in a building?

Reply: You **must** inform employees about the presence of material containing <1% asbestos when you know it is present. When employees perform work activities involving such material, you are required per 29 CFR 1926.1101(f)(2)(i) to assess their exposures to

asbestos. In connection with this requirement you must, per 29 CFR 1926.1101(f)(6)(i), provide affected employees an opportunity to observe any monitoring of asbestos exposure. After the monitoring, you must, per 29 CFR 1926.1101(f)(5)(i) and (ii), inform employees of the monitoring results representing their asbestos exposures. In accordance with 29 CFR 1926.1101(e) and (k)(7), if asbestos exposures exceed or are likely to exceed one or both of the PELs, then you must provide warning by posting the area where these overexposures are occurring as a regulated area.

Although employers do not **have to** label containers of waste and debris containing <1% asbestos, promptly placing the waste and debris in leak-tight containers is a work practice that reduces the exposures of the employees producing the waste and debris. That is especially so because this work practice is to be used in conjunction with wet methods or wetting agents. By promptly cleaning up the waste and debris and placing it in containers, it is kept from drying out and possibly releasing airborne asbestos into the work environment. Leak-tight containers prevent the asbestos from seeping out and reintroducing an asbestos exposure hazard.

Question 7: If OSHA had intended to regulate material containing <1% asbestos, why do not employers have to use HEPA-filters when using vacuum cleaners to clean up material containing <1% asbestos?

Reply: An employer does not have to use vacuum cleaners to clean up material containing <1% asbestos. However, if an employer uses vacuum cleaners to clean up the material, then per 29 CFR 1926.1101(l)(1), it must use HEPA-filtered vacuuming equipment.

Question 8: If OSHA had intended to regulate material containing <1% asbestos, why does it not discuss the distinction between ACM and material containing <1% asbestos in the preamble to the regulation?

Reply: OSHA was already regulating materials that contained <1% asbestos. In promulgating the 1994 standard, OSHA was determining which materials to regulate further by additional work practice and engineering control requirements.

Question 9: If OSHA had intended to regulate material containing <1% asbestos, why did it not examine the compliance costs for working with this material?

Reply: As we stated above, OSHA was already regulating materials with <1% asbestos. In promulgating the 1994 standard, OSHA was determining the cost of complying with additional work practice and engineering control requirements.

Question 10: If OSHA had intended to regulate material containing <1% asbestos, why did it not mention this in its CPLs dealing with asbestos in construction?

Reply: That was simply an oversight by the preparers of the Asbestos Compliance Directive. It will be corrected when the directive is next updated.

Thank you for your interest in occupational safety and health. We hope you find this information helpful. OSHA requirements are set by statute, standards, and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at http://www.osha.gov. If you have any further questions, please feel free to contact the Office of Health Enforcement at (202) 693-2190.

Sincerely,

Richard E. Fairfax, Director
Directorate of Enforcement Programs

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[1] The asbestos PELs are an eight-(8-) hour time-weighted average (TWA) limit of 0.1 fiber per cubic centimeter of air (0.1 f/cc) and an excursion limit of 1.0 f/cc as averaged over a sampling period of thirty (30) minutes. [back to text]

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[2] Paragraph (g)(8)(ii)is directed toward the removal of roofing materials containing >1% asbestos. However, OSHA interprets the reference at (g)(8)(ii)(B) to the exception to the use of wet methods for reasons of infeasibility or the creation of safety hazards as also applying to removing any roofing materials that do not contain >1% asbestos. [back to text]

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[3] The reference to paragraph (g)(8)(ii) applies even for material that does not contain >1% asbestos. [back to text]

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[4] The phrase, *Installed Asbestos Containing Building Material*, is intended to be the heading and the start of 29 CFR 1926.1101(k)(1). The three sentences preceding that phrase are intended to be an introduction for 29 CFR 1926.1101(k) and precede (k)(1). [back to text]

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Occupational Safety & Health Administration
200 Constitution Avenue, NW
Washington, DC 20210

Standard Interpretations

10/27/2003 - Application of construction standard to demolition operations involving material less than 1% asbestos.

Standard Interpretations - Table of Contents

- **Standard Number:** 1926.1101; 1926.1101(g)(1)(ii); 1926.1101(g)(1)(iii)

October 27, 2003

JoAnn Hernandez, Chief
Base Infrastructure Flight
37 Contracting Squadron
1655 Selfridge Avenue
Lackland AFB, TX 78236-5103

Dear Ms. Hernandez:

Thank you for your March 20 letter to the Occupational Safety and Health Administration's (OSHA's) Directorate of Enforcement Programs. You asked for an authoritative interpretation of 29 CFR 1926.1101(g)(1) in OSHA's Construction Asbestos Standard as it applies to demolition operations involving material containing <1% asbestos. This letter constitutes OSHA's interpretation only of the requirements discussed and may not be applicable to any question not delineated within your original correspondence. Your paraphrased question and our reply are below.

Question: *Do the wet handling, prompt clean up, and disposal requirements set forth in 29 CFR 1926.1101(g)(1)(ii) and (iii) apply to demolition operations involving material containing <1% asbestos?*

Reply: Yes, those requirements do apply to demolition operations involving material containing <1% asbestos.

Thank you for your interest in occupational safety and health. We hope you find this information helpful. OSHA requirements are set by statute, standards, and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at http://www.osha.gov. If you have any further questions, please feel free to contact the Office of Health Enforcement at 202-693-2190.

Sincerely,

Richard E. Fairfax, Director
Directorate of Enforcement Programs

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Occupational Safety & Health Administration
200 Constitution Avenue, NW
Washington, DC 20210

Standard Interpretations

08/07/1998 - Requirements for work with materials containing less than 1 percent asbestos.

Standard Interpretations - Table of Contents

- **Standard Number:** 1926.1101(b); 1926.1101(g)

Still need a negative exposure assessment.
* See the Demolition of 71% Clarification Letter 8/13/1999

August 7, 1998

Mr. Joseph A. Rosenthal
Updike, Kelly & Spellacy, P.C.
One Century Tower
265 Church Street
New Haven, Connecticut 06510-7002

Dear Mr. Rosenthal:

We have received your letter addressed to Edith Nash of our Solicitor's office, asking us to reconsider our prior interpretation of June 6, 1997, that work concerning building materials containing less than 1% asbestos is covered by the Occupational Safety and Health Administration's (OSHA's) asbestos construction standard (29 CFR 1926.1101). We are confirming some parts and modifying other parts of our earlier interpretation.

As we stated in the earlier letter, we agree that plaster that contains less than 1% is not "asbestos-containing material" under the standard. However, as we noted, certain precautions set out in paragraph (g) are universal and apply to all work with asbestos, regardless of airborne exposures, or asbestos content of previously installed materials. These requirements are to utilize wet methods, to the extent feasible, (paragraph (g)(1)(ii)); and to promptly clean up and dispose in closed containers, waste and debris contaminated with asbestos, (paragraph (g) (1)(iii)). However, in a change from our June letter, we interpret that paragraph (g)(1)(i) which requires HEPA vacuuming, does not apply to work with material that contains less than 1% asbestos.

We note that the asbestos content of plaster in an area is particularly difficult to assess, in large part because the asbestos often had been mixed into the plaster at the site, and the asbestos content may vary even when the area which is being disturbed looks homogenous. For these reasons an assessment that the plaster in a disturbed area contains less than 1% asbestos must be based on analysis of sufficient samples to represent the entire area.

We hope that this letter clarifies OSHA's position on these issues.

Sincerely,

John B. Miles, Jr.
Director
Directorate of Compliance Programs

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Occupational Safety & Health Administration
200 Constitution Avenue, NW
Washington, DC 20210

Standard Interpretations

08/13/1999 - Requirements for demolition operations involving material containing <1% asbestos. (Plus, Point Counting Acceptance)

Standard Interpretations - Table of Contents

- **Standard Number:** 1926.1101(b); 1926.1101(f); 1926.1101(g); 1926.1101(k); 1926.1101(n)

August 13, 1999

NEA is required.
*See Page 2 also *

Walter Chun, M.S., CSP, CHSP, CECM
OSHCON, INC.
P.O. Box 25850
Honolulu, Hawaii 96825-0850

Dear Mr. Chun:

This is in response to your October 9, 1998 request for clarification of the Occupational Safety and Health Administration's (OSHA's) Construction Industry Asbestos Standard, 29 CFR 1926.1101. We apologize for the delay in our reply.

You note that according to 29 CFR 1926.1101(a)(1), the Construction Industry Asbestos Standard regulates demolition or salvage of structures where asbestos is present and that 29 CFR 1926.1101(b) defines asbestos-containing material (ACM) as any material containing >1% asbestos. You ask that we clarify the applicability of the standard to a demolition operation involving material containing <1% asbestos.

If the demolition operation would involve material containing >1% asbestos it would be Class I or II asbestos work, since Class I or Class II asbestos work is removal of ACM, and according to 29 CFR 1926.1101(b), "removal" includes demolition operations. Since the demolition operation involves material containing <1% asbestos, the work is not a designated class of asbestos work, as you correctly note in your letter. Therefore, only 29 CFR 1926.1101(g)(1)(ii) and (iii), as well as those recordkeeping requirements under 29 CFR 1926.1101(n) that are associated with the negative exposure assessment, apply so long as neither asbestos permissible exposure limit (PEL) is exceeded or might be exceeded. 29 CFR 1926.1101(g)(1)(ii) requires:

"Wet methods, or wetting agents, to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup, except where employers demonstrate that the use of wet methods is infeasible due to for example, the creation of electrical hazards, equipment malfunction, and, in roofing, except as provide in paragraph (g)(8)(ii) of this section;"

and 29 CFR 1926.1101(g)(1)(iii) requires:

"Prompt clean-up and disposal of wastes and debris contaminated with asbestos in leak-tight containers except in roofing operations, where the procedures specified in paragraph (g)(8)(ii) of this section apply."

On the other hand, if at least one of the asbestos PELs is exceeded or might be exceeded, then all the requirements that are not strictly reserved as work practice requirements for Class I, II, III, or IV asbestos work apply or might apply. An exception would be if there were not frequent enough exposures above the asbestos PELs to activate a specific requirement. For example, an employer is not required to make a medical surveillance program available to an employee who is not engaged in Class I, II, or III work or exposed at or above a permissible exposure limit for a combined total of 30 or more days per year.

An example of the many requirements that apply when either one of the asbestos PELs is exceeded is 29 CFR 1926.1101(j)(4) which states, "The employer shall ensure that employees do not smoke in work areas where they are occupationally exposed to asbestos because of activities in that work area." This requirement applies wherever the employer must establish an asbestos-associated regulated area. Such a regulated area must be established where Class I, II, or III asbestos work is done or where at least one of the asbestos PELs is exceeded.

You ask if a demolition project involving only materials containing <1% asbestos requires an initial negative exposure assessment. In order to avoid the need to comply with the elements of the standard that are applicable when either asbestos PEL is exceeded, the contractor conducting the demolition project must produce an initial negative exposure assessment for his/her employees.

There are three potential approaches provided under 29 CFR 1926.1101(f)(2) for producing a negative exposure assessment. These are the use of objective data, previous air monitoring results, or current air monitoring results. If the contractor cannot produce a negative exposure assessment with objective data or previous air monitoring results, then the contractor must conduct asbestos exposure monitoring. Until the contractor is able to produce a negative exposure assessment for his/her employees, the contractor must comply with the elements of the standard that are applicable when either asbestos PEL is exceeded.

NEA required

As to your inquiry into the protective equipment and training that must be provided to employees who are working while the contractor seeks to produce a negative exposure assessment, the contractor must provide those employees with the protective clothing described in 29 CFR 1926.1101(i). At a minimum, half-mask air-purifying respirators, other than disposable respirators, equipped with high efficiency filters are required. And, the contractor must provide those employees training that meets the mandates of 29 CFR 1926.1101(k)(9)(viii).

You also ask about the procedures for determining the asbestos content of material. Specifically, you ask if OSHA recognizes the point counting method for determining the asbestos content. Yes, OSHA considers the point counting method to be acceptable, but OSHA does not require that it be used. Polarized light microscopy (PLM) is the root method used for identification of asbestos. Point counting is one of the techniques used to quantify the amount of asbestos present in a sample on which PLM has already been performed.

Acceptance of Point Count

The last issues you raise concern 29 CFR 1926.1101(k), Communication of hazards. You ask whether the building/facility owner must provide information regarding the presence of building or facility materials that contain <1% asbestos. The owner is not required to provide this information. The owner is required to provide information only about the presence of materials containing greater than or equal to 1% asbestos. Nonetheless, a contractor receiving notification from a building owner that all materials in the building are non-ACM may not conclude from this communication that the materials present no potential asbestos exposure hazard for the contractor's employees. If the materials were tested for asbestos in accordance with the testing requirements in 29 CFR 1926.1101, then the contractor is not required to observe the standard's requirements for Class I, II, III, or IV asbestos work when tasks involving the materials are performed. However, if the materials contain some amount of asbestos that is less than or equal to 1%, the contractor must observe the asbestos PELs and 29 CFR 1926.1101(g)(1)(ii) and (iii). Therefore, the contractor has an implied obligation to determine if the materials contain some asbestos. The contractor must exercise due diligence to identify the presence of asbestos in materials.

An investigation of whether any of the materials are prone to contain some amount of asbestos which is less than or equal to 1% would be one example of action the employer must take in order to meet the test of exercising due diligence. If the contractor determines that the materials contain some asbestos, then the contractor must determine if compliance with 29 CFR 1926.1101(g)(1)(ii) and (iii) is sufficient for preventing exposures above the asbestos PELs. Engineering and work practice controls must be used whenever asbestos exposures above either PEL would occur without their use. If feasible engineering and work practice controls are not adequate to prevent exposures above an asbestos PEL, respiratory protection must be used to supplement the controls.

You note that 29 CFR 1926.1101(k) sets out the responsibilities of employers for providing employees information on the presence of asbestos. You ask if employees performing demolition work involving materials containing <1% asbestos are covered by these employer responsibilities. The employer responsibilities to which you refer are presented at 29 CFR 1926.1101(k)(3). The requirements at 29 CFR 1926.1101(k)(3) are not applicable to employees doing demolition work involving material containing <1% asbestos because the scope of the requirements is limited to ACM and PACM. However, if the employee asbestos exposure levels exceed one or both of the PELs, the employees will be informed of the presence of asbestos because the employer must establish a regulated area and implement procedures that comply with 29 CFR 1926.1101(e).

You asked if there are other standards that can be used to protect employees from an asbestos health hazard presented by material containing <1% asbestos. The shipyard employment standard for asbestos, 29 CFR 1915.1001; the General Industry standard for asbestos, 29 CFR 1910.1001; and 29 CFR 1926.1101 are the only OSHA standards for regulating the asbestos health hazard presented by material containing <1% asbestos. The Hazard Communication Standard, 29 CFR 1910.1200, does not apply to material containing <1% asbestos.

Thank you for your interest in occupational safety and health. We hope you find this information helpful. Please be aware that OSHA's enforcement guidance is subject to periodic review and clarification, amplification, or correction. Such guidance could also be affected by subsequent rulemaking. In the future, should you wish to verify that the guidance provided herein remains current, you may consult OSHA's website at http://www.osha.gov.

If you have any further questions, please feel free to contact OSHA's Office of Health Compliance Assistance at (202) 693-2190.

Sincerely,

Richard E. Fairfax, Director
Directorate of Compliance Programs

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