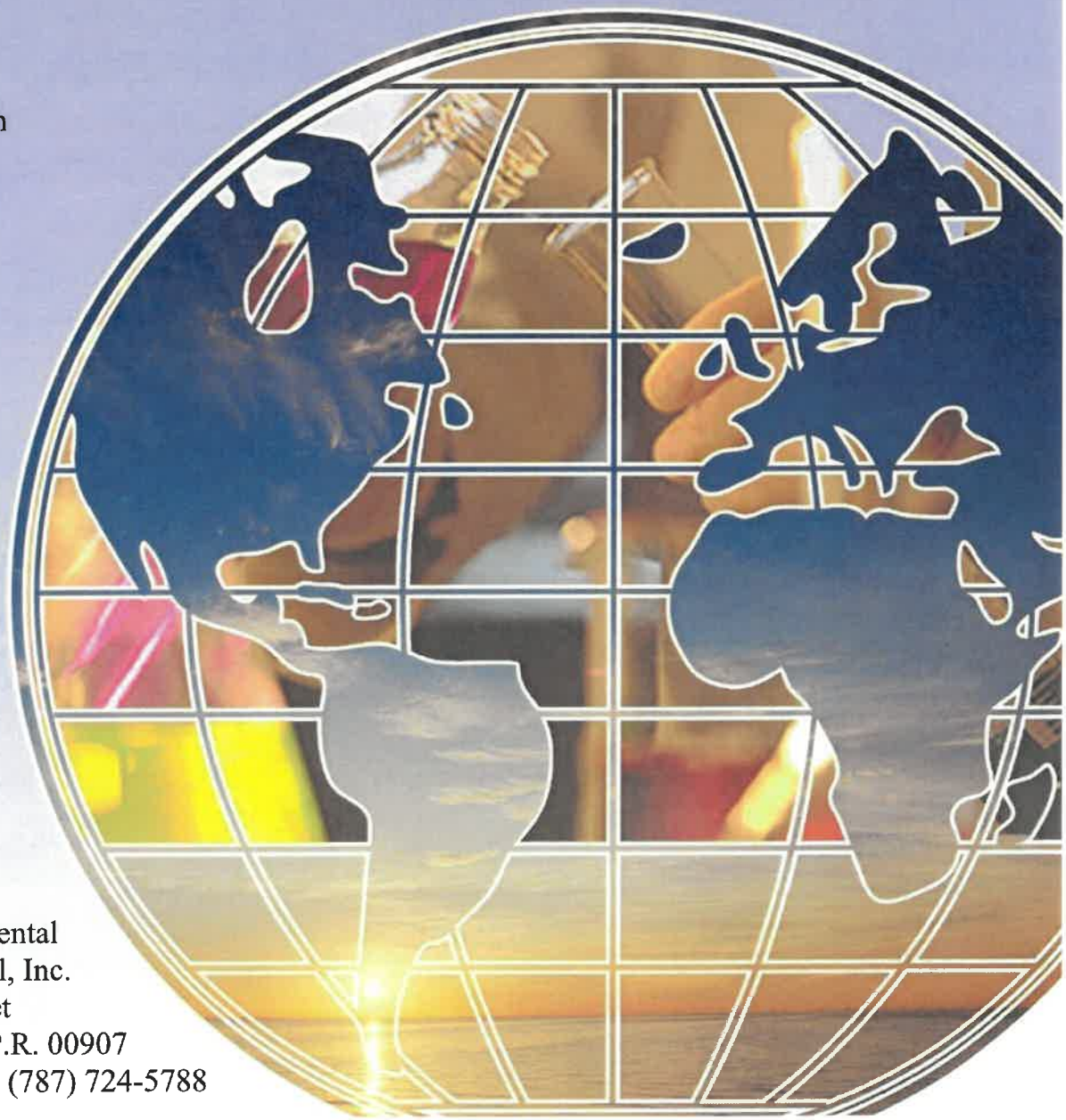
AES International Inc.

LIMITED ENVIRONMENTAL SURVEY
FOR
LEAD BASED PAINT (LBP)
AND
ASBESTOS CONTAINING MATERIALS (ACM)
FOR
OFICINAS REGIONALES/HAFI/
ANTIGUA RESIDENCIA DE ENFERMERAS
AGUADILLA, PUERTO RICO

Prepared For:
Department of Health



Prepared By:

Analytical Environmental
Services International, Inc.
611 Monserrate Street
2nd Floor, Santurce, P.R. 00907
(787) 722-0220 / Fax (787) 724-5788

AES International Inc.

LEAD

TABLE OF CONTENTS

I. SUMMARY

A limited survey for Lead Based Painted (LBP) Components was conducted by AES International for Oficinas Regionales/HAFI/Antigua Residencia de Enfermeras located on 135 Jose de Diego Street, Aguadilla, Puerto Rico, 00603 (Project #:95429, DI#:151684). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The LBP limited investigation was conducted by Elme Rivera, an DRNA certified lead risk assessor. The survey, performed with an XRF instrument manufactured by Heuresis, Model Pb200i, was conducted using HUD protocol of 2012.

The scope of the survey included sampling of LBP suspected components listed on FEMA Lead Checklist for the project listed herein.

There were no LBP components present in the areas tested which were listed under FEMA's list of tasks. However, LBP components not listed in FEMA's scope were identified in the same areas and are listed below:

Exterior, Stairs			
Entrance Riser	Ceramic	Brown	68 ln.ft
2nd Floor			
Adjacent Mech Room- Janitor Room			
Wall B	Ceramic	White	
Wall C	Ceramic	White	60 sq.ft
Wall D	Ceramic	White	
Dike Side	Ceramic	White	20 sq.ft

**All positive findings are not part of scope of work listed under FEMA DISASTER 4339DR-PR and 4473DR-PR contract (Project #:95429, DI#:151684).*

If remodeling activities will be conducted in the nearest future, it is required to remove all LBP materials prior to performance of said activities.

1.0 INTRODUCTION

A limited survey for Lead Based Painted (LBP) Components was conducted by AES International for Oficinas Regionales/HAFI/Antigua Residencia de Enfermeras located on 135 Jose de Diego Street, Aguadilla, Puerto Rico, 00603 (Project #:95429, DI#:151684). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The LBP limited investigation was conducted by Elme Rivera, an DRNA certified lead risk assessor. The survey, performed with an XRF instrument manufactured by Heuresis, Model Pb200i, was conducted using HUD protocol of 1997, revised in 2012. The results are presented herein.

2.0 TESTING PROCEDURES

The testing was performed with an XRF instrument manufactured by Heuresis, Model Pb200i. The selected mode allows reference to the abatement level set at 1.0 mg/cm^2. The results are reported at 95% confidence levels.

3.0 LEAD BASED PAINT TESTING METHODOLOGY

The hazard level of lead in paint has been determined by the department of Housing & Urban development as 1.0 mg/cm^2, as measured by XRF, or AAS (Atomic Absorption Spectroscopy), or 0.5% be weight (or 5000 ppm) as measured by AAS, or Inductive Coupled Plasma (ICP). The same level was adopted by EPA regulations published in 1992, under Title X.

The only lead-based paint testing protocol officially available at this time was published by HUD initially in 1990, revised in 1991 and finalized in 1995 (see above HUD reference). A revised chapter 7 was published in 1997 and finalized in 2012. In accordance to the new protocol, almost all surfaces present in the units have to be tested. The above guidelines were used to perform lead based-paint testing for this project.

The main steps involved in a single-family inspection are:

1. Perform inventory of all testing combinations
2. Select painted area to be tested
3. Perform XRF testing (including calibration checks)
4. Collect and analyze paint chip samples, for inconclusive results.
5. Classify XRF and paint chips results
6. Review and evaluate the data
7. Report findings

AES International personnel classify each XRF lead reading as positive, negative, or inconclusive. This classification is based on manufacturer XRF performance characteristic sheet (PCS), for each substrate. Samples and/or additional readings are taken from inconclusive areas.
Calibration verification of the instrument was performed prior to beginning of daily task, when the instrument was turned on, and at the end of the day. The verification was conducted on a NIST

standard of 1.0 mg/cm^2. Acceptance criteria used was +-0.3 mg/cm^2. The data for calibration verification is attached in Appendix II. Final retesting can be found in XRF Data- Report CTS Aguadilla, done the same day.

Initially, a visual inspection was performed using FEMA lead based paint checklist and DDD document to identify materials listed to be sampled. Subsequently, readings were taken from suspected materials identified in FEMA's lead checklist (see Appendix II).

The identification of tested walls is based on HUD guidelines as follow:
Wall A-entrance wall
Walls B, C, and D-sequential walls, clockwise from A.

At the completion of the testing, ten (10) surfaces were retested as to assess precision of the testing. Statistical calculations performed on test-retest results suggest that the results are within the tolerance limits and therefore acceptable.

4.0 RESULTS

4.1 Results of XRF inspection

The results of the tested components are shown in Appendix II. One hundred and seven (107) XRF readings were taken (see also summary).

5.0 CONCLUSIONS

An LBP limited survey was conducted for Oficinas Regionales/HAFI/Antigua Residencia de Enfermeras located on 135 Jose de Diego Street, Aguadilla. There were no LBP components present in the areas tested which were listed under FEMA's list of tasks. However, LBP components not listed in FEMA's scope were identified in the same areas. Some painted surfaces may contain levels of lead below 1.0 mg/cm^2, which could create lead dust, or lead contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding.

This report shall be kept by the owner and all future owners for the life of the buildings. A copy of the relevant report shall be given to each tenant, buyer or lessor, as to comply with federal requirements for disclosure under lead disclosure rule of 1996 (see also section 1018 of Title X).

The LBP survey conducted did not address all suspected LBP present in the building but only materials listed by FEMA under the "FEMA Lead and Asbestos Checklist" and (when available) the Damage Description and Dimension (DDD) document. Consequently negative, or positive findings refer only to the areas and materials tested from selected locations.

Elme Rivera, DRNA Lead Risk Assessor
Lic#: LBPRA-21722-207

Table 1. Summary of LBP Positive Components at Oficinas Regionales/ HAFI/Antigua Residencia de Enfermeras, Aguadilla, Puerto Rico.

Structure	Room	Components	Substrate	Color	Quantity
Oficinas Regionales/ HAFI/Antigua Residencia de Enfermeras					
	Exterior, Stairs				
		Entrance Riser	Ceramic	Brown	68 ln.ft
	2nd Floor				
	Adjacent Mech Room- Janitor Room				
		Wall B	Ceramic	White	
		Wall C	Ceramic	White	60 sq.ft
		Wall D	Ceramic	White	
		Dike Side	Ceramic	White	20 sq.ft

*All positive findings are not part of scope of work listed under FEMA DISASTER 4339DR-PR and 4473DR-PR contract (Project #:95429, DI#:151684).

AES International Inc.

Appendix I

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Analytical Environmental Services International, Inc.

611 Monserrate St. Suite 2 Santurce, PR 00907

Laboratory ID: LAP-102702

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

☑	**INDUSTRIAL HYGIENE**	Accreditation Expires: February 01, 2023
☑	**ENVIRONMENTAL LEAD**	Accreditation Expires: February 01, 2023
☐	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires:
☐	**FOOD**	Accreditation Expires:
☐	**UNIQUE SCOPES**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O. Morton

Cheryl O Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision19: 09/01/2020

Date Issued: 02/28/2021

GOBIERNO DE PUERTO RICO

Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

AES International, Inc.

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 127 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como **Firma** para llevar a cabo actividades relacionadas a Mitigación de Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-06922-014

Fecha de emisión: Abril 6, 2022

Fecha de Expiración: Abril 5, 2023

DRNA

José Roque Juliá
Jefe
División Desperdicios Tóxicos

Lead Risk Assessor Credentials

CERTIFICACIÓN PLOMO PUERTO RICO

Esta tarjeta autoriza a:

Elme Rivera Pérez

Para realizar actividades relacionadas a Mitigación de Pintura con Base de Plomo

Disciplina: **Evaluador de Riesgos**

Fecha de Expiración: Julio 14, 2023

Certificación #:

LBPRA-21722-207

Firma Autorizada
Departamento de Recursos Naturales y Ambientales

Performance Characteristic Sheet

EFFECTIVE DATE: **December 1, 2015**

MANUFACTURER AND MODEL:

Make: ***Heuresis***
Models: ***Model Pb200i***
Source: ***^{57}Co, 5 mCi (nominal – new source)***

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in November 2015, with two separate instruments running software version 2.1-2 in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.0 mCi; source ages were approximately one year.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm^2 for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm^2 at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

> Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm^2. Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.
>
> Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.
>
> For each substrate type (the 1.02 mg/cm^2 NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):
>
> Correction value = (1st + 2nd + 3rd + 4th + 5th + 6th *Reading*)/6 - 1.02 mg/cm^2
>
> Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

In the Action Level paint test mode, the instrument takes the longest time to complete readings close to the Federal standard of 1.0 mg/cm^2. The table below shows the mean and standard deviation of actual reading times by reading level for paint samples during the November 2015 archive testing. The tested instruments reported readings to one decimal place. No significant differences in reading times by substrate were observed. These times apply only to instruments with the same source strength as those tested (2.0 mCi). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times, than those in the table.

Mean and Standard Deviation of Reading Times in Action Level Mode by Reading Level		
Reading (mg/cm^2)	**Mean Reading Time (seconds)**	**Standard Deviation (seconds)**
< 0.7	3.48	0.47
0.7	7.29	1.92
0.8	13.95	1.78
0.9 – 1.2	15.25	0.66
1.3 – 1.4	6.08	2.50
≥ 1.5	3.32	0.05

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to the stated threshold for the instrument (1.0 mg/cm^2), and *negative* if they are *less than* the threshold.

DOCUMENTATION:

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997.

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the XRF manufacturer.

AES International Inc.

Appendix II

Federal Emergency Management Agency
FEMA-4339-DR-PR

FEMA

Lead and Asbestos Checklist (428 Projects)

Oficinas Regionales / HAFF Aguadilla / Ant. Residencia Enfermeras

Project #: 95429 **DI #:** 151684

(1) Does the facility meet one of the following criteria?

Asbestos		Lead	
◉	Building constructed before 1990 and a Construction Permit is triggered based on the below permit checklist	◉	Building constructed before 1978 and a Construction Permit is triggered based on the below permit checklist
○	Building constructed before 1990 and project requires a demolition permit	○	Building constructed before 1978 and a Demolition permit is required
○	Applicant has documentation confirming the presence of asbestos* Name of attachment:	○	Applicant has documentation confirming presence of lead paint * Name of attachment:
○	None This DI does not qualify for asbestos abatement estimating for 428 project	○	None This DI does not qualify for lead abatement estimating for 428 project

***Applicant must provide the result of a test or survey for the facility which confirms the presence of lead and/or asbestos and must also provide dimensions of the lead and/or asbestos**

(2) Review DDD to identify suspect materials

Lead		
Suspect Material	**Location in the Building (specify the room)**	**Quantity in the DDD**
Interior and Exterior Finishes		
Exterior/interior paint	Interior (1st and 2nd Floor), Exterior	18,621 SF
Ceramic Tile (Wall, Floor)		
Ceramic equipment (Bathtubs, Sinks)		
Metal components (Doors, Windows)	2nd Floor Hallway, Exterior	4 each exterior hollow aluminum door, 36 IN wide x 80 IN high
Fire retardant paint		
Other fire protection materials		
Roads and Bridges		
Road sign paints (Roads, Bridge Parapets)		
Traffic paint (Yellow, white, blue, etc.)		
Other		
Explain:		

Asbestos		
Suspect Material	**Location in the Building (specify the room)**	**Quantity in the DDD**
Roofing Materials		
Roof and nonroof coatings	[redacted]	9000 SF
Roofing felt		
Roofing stucco		
Roof panels		
Asphaltic, Bituminous, SBS, Mastic Sealant, polyolefins		
Interior and Exterior Finishes		
Vinyl floor tiles	1st and 2nd floors, interiors	349 SF
Vinyl floor tile glue/ adhesives		
Ceiling tiles	1st and 2nd floors	1,876 SF
Millboard		
Insulation		
Plasters		
Mastic		
Textured paints (simulated stucco)		
Block filler paints (masonry coating)		
Cement products		
Drywall		
Electrical/HVAC Components		
Duct and return pipeline wrapping		25.5 Linear Ft, 1.5 Inches wrapping
Boilers		
Sealants		
Extruded sealant tapes		
High-grade electrical paper		
Insulation for friction parts		
Insulation for furnaces and refrigerators		
Glues, Adhesives, Mastic, HVAC Asbestos Sealants		
Other		
Explain:		

AES International Inc.

Appendix III

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Departamento de Salud de Puerto Rico** Date: 10/19/22
Project Name: Oficinas Regionales/HAFI/Ant. Residencia Enfermeras Inspector: Elme Rivera
Address: Aguadilla, Puerto Rico XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
1					Calibration	1.0	
2					Calibration	1.0	
3					Calibration	1.0	
4	Exterior	Exterior	Concrete	Light Yellow	Wall A	0.5	
5	Exterior	Exterior	Concrete	Light Yellow	Wall B	0.6	
6	Exterior	Exterior	Concrete	Light Yellow	Wall C	0.4	
7	Exterior	Exterior	Concrete	Light Yellow	Wall 'D	0.3	
8	Exterior	Exterior	Concrete	Light Yellow	Window Sill	0.4	
9	Exterior	Exterior	Metal	White	Window	0.5	
10	Exterior	Exterior	Concrete	Brown	Baseboard Wall A	0.1	
11	Exterior	Exterior	Concrete	Brown	Cargo Zone	0.4	
12	Exterior	Exterior	Concrete	Yellow	Cargo Trim	0.6	
13	Exterior	Exterior	PVC	Light Yellow	Pipe 4"	0.1	
14	Exterior	Exterior, Stairs	Ceramic	Brown	Exterior Riser	**2.7**	
15	Exterior	Exterior, Stairs	Ceramic	Brown	Exterior Tread	0.1	
16	Exterior	Exterior	Concrete	Brown	Baseboard Wall B	0.1	
17	Exterior	Exterior	Concrete	Brown	Baseboard Wall C	0.2	

Approved By: Ady Padan Ph.D. **Date: 10/19/2022**

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611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Departamento de Salud de Puerto Rico** Date: 10/19/22
Project Name: Oficinas Regionales/HAFI/Ant. Residencia Enfermeras Inspector: Elme Rivera
Address: Aguadilla, Puerto Rico XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
18	Exterior	Exterior	Concrete	Brown	Baseboard Wall D	0.3	
19	1st Floor	Corridor	Concrete	White	Wall A	0.1	
20	1st Floor	Corridor	Concrete	White	Wall B	0.2	
21	1st Floor	Corridor	Concrete	White	Wall C	0.1	
22	1st Floor	Corridor	Concrete	White	Wall D	0.2	
23	1st Floor	Corridor	Ceramic	Brown	Floor Tile	0.3	
24	1st Floor	Corridor	Ceramic	Brown	Baseboard	0.1	
25	1st Floor	Corridor	Concrete	White	Ceiling	0.1	
26	1st Floor	Vaccination Program Office	Wood	Brown	Door Frame	0.1	
27	1st Floor	Vaccination Program Office	Wood	Brown	Door	0.2	
28	1st Floor	Vaccination Program Office	Concrete	White	Wall A	0.3	
29	1st Floor	Vaccination Program Office	Concrete	White	Wall B	0.1	
30	1st Floor	Vaccination Program Office	Concrete	Light Brown	Wall C	0.2	
31	1st Floor	Vaccination Program Office	Concrete	White	Wall D	0.3	
32	1st Floor	Vaccination Program Office	Concrete	White	Window Sill	0.1	
33	1st Floor	Break Room	Wood	Brown	Door Frame	0.1	
34	1st Floor	Break Room	Wood	Brown	Door	0.2	

Approved By: Ady Padan Ph.D. **Date: 10/19/2022**

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LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Departamento de Salud de Puerto Rico** Date: 10/19/22
Project Name: Oficinas Regionales/HAFI/Ant. Residencia Enfermeras Inspector: Elme Rivera
Address: Aguadilla, Puerto Rico XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
35	1st Floor	Break Room	Concrete	White	Wall A	0.3	
36	1st Floor	Break Room	Concrete	White	Wall B	0.1	
37	1st Floor	Break Room	Concrete	White	Wall C	0.2	
38	1st Floor	Break Room	Concrete	White	Wall D	0.1	
39	1st Floor	Break Room	Concrete	White	Window Sill	0.1	
40	1st Floor	Break Room	Metal	White	Window	0.2	
41	1st Floor	Salud Ambiental Office	Wood	Brown	Door Frame	0.1	
42	1st Floor	Salud Ambiental Office	Wood	Brown	Door	0.2	
43	1st Floor	Salud Ambiental Office	Concrete	Cream	Wall A	0.1	
44	1st Floor	Salud Ambiental Office	Concrete	White	Wall B	0.2	
45	1st Floor	Salud Ambiental Office	Concrete	Cream	Wall C	0.1	
46	1st Floor	Salud Ambiental Office	Concrete	White	Wall D	0.1	
47	1st Floor	Salud Ambiental Office	Concrete	Cream	Column	0.2	
48	1st Floor	Epidemiology Office	Wood	Brown	Door Frame	0.1	
49	1st Floor	Epidemiology Office	Wood	Brown	Door	0.2	
50	1st Floor	Epidemiology Office	Concrete	White	Wall A	0.1	
51	1st Floor	Epidemiology Office	Concrete	White	Wall B	0.2	

Approved By: Ady Padan Ph.D. **Date: 10/19/2022**

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Project Name: Oficinas Regionales/HAFI/Ant. Residencia Enfermeras Inspector: Elme Rivera
Address: Aguadilla, Puerto Rico XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
52	1st Floor	Epidemiology Office	Concrete	White	Wall C	0.3	
53	1st Floor	Epidemiology Office	Concrete	White	Wall D	0.1	
54	1st Floor	Epidemiology Office	Concrete	White	Baseboard	0.2	
55	1st Floor	Epidemiology Office	Concrete	White	Window Sill	0.1	
56	1st Floor	Epidemiology Office	Metal	White	Window	0.2	
57	2nd Floor	Corridor	Concrete	White	Wall A	0.1	
58	2nd Floor	Corridor	Concrete	White	Wall B	0.2	
59	2nd Floor	Corridor	Concrete	White	Wall C	0.3	
60	2nd Floor	Corridor	Concrete	White	Wall D	0.1	
61	2nd Floor	Corridor	Ceramic	Brown	Floor Tile	0.1	
62	2nd Floor	Corridor	Ceramic	Brown	Baseboard	0.2	
63	2nd Floor	Balcony	Metal	White	Door Frame	0.1	
64	2nd Floor	Balcony	Metal	White	Door	0.2	
65	2nd Floor	Balcony	Concrete	Light Yellow	Wall A	0.3	
66	2nd Floor	Balcony	Concrete	Brown	Lower Wall B	0.1	
67	2nd Floor	Balcony	Concrete	Brown	Lower Wall C	0.1	
68	2nd Floor	Balcony	Concrete	Brown	Lower Wall D	0.2	

Approved By: Ady Padan Ph.D. **Date: 10/19/2022**

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Project Name: Oficinas Regionales/HAFI/Ant. Residencia Enfermeras Inspector: Elme Rivera
Address: Aguadilla, Puerto Rico XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
69	2nd Floor	Balcony	Ceramic	Brown	Floor Tile	0.1	
70	2nd Floor	Balcony	Ceramic	Brown	Baseboard	0.3	
71	2nd Floor	Adjacent Mech Room	Wood	Brown	Door Frame	0.3	
72	2nd Floor	Adjacent Mech Room	Wood	Brown	Door	0.1	
73	2nd Floor	Adjacent Mech Room	Concrete	White	Wall A	0.2	
74	2nd Floor	Adjacent Mech Room	Concrete	White	Wall B	0.1	
75	2nd Floor	Adjacent Mech Room	Concrete	White	Wall C	0.2	
76	2nd Floor	Adjacent Mech Room	Concrete	White	Wall D	0.1	
77	2nd Floor	Adjacent Mech Room	Concrete	Green	Upper Wall A	0.2	
78	2nd Floor	Adjacent Mech Room	Concrete	Green	Upper Wall B	0.1	
79	2nd Floor	Adjacent Mech Room	Concrete	Green	Upper Wall C	0.2	
80	2nd Floor	Adjacent Mech Room	Concrete	Green	Upper Wall D	0.1	
81	2nd Floor	Adjacent Mech Room	Concrete	White	Ceiling	0.1	
82	2nd Floor	Adjacent Mech Room	Wood	Brown	Door Frame	0.2	
83	2nd Floor	Adjacent Mech Room	Wood	Brown	Door	0.1	
84	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Cream	Wall A	0.1	
85	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Cream	Wall B	0.1	

Approved By: Ady Padan Ph.D. **Date: 10/19/2022**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Departamento de Salud de Puerto Rico
Project Name: Oficinas Regionales/HAFI/Ant. Residencia Enfermeras
Address: Aguadilla, Puerto Rico

Date: 10/19/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
86	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Cream	Wall C	0.2	
87	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Cream	Wall D	0.1	
88	2nd Floor	Adjacent Mech Room- Janitor	Ceramic	Brown	Floor Tile	0.2	
89	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Cream	Divisory Wall	0.1	
90	2nd Floor	Adjacent Mech Room- Janitor	Ceramic	White	Wall B	**4.6**	
91	2nd Floor	Adjacent Mech Room- Janitor	Ceramic	White	Wall C	**4.7**	
92	2nd Floor	Adjacent Mech Room- Janitor	Ceramic	White	Wall D	**4.4**	
93	2nd Floor	Adjacent Mech Room- Janitor	Ceramic	Brown	Dike Top	0.1	
94	2nd Floor	Adjacent Mech Room- Janitor	Ceramic	White	Dike Side	**4.9**	
95	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Light Blue	Upper Wall A	0.1	
96	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Light Blue	Upper Wall B	0.2	
97	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Light Blue	Upper Wall C	0.1	
98	2nd Floor	Adjacent Mech Room- Janitor	Concrete	Light Blue	Upper Wall D	0.2	
99	2nd Floor	Medicaid Office	Wood	Brown	Door Frame	0.3	
100	2nd Floor	Medicaid Office	Wood	Brown	Door	0.1	
101	2nd Floor	Medicaid Office	Concrete	Light Green	Wall A	0.1	
102	2nd Floor	Medicaid Office	Concrete	Light Green	Wall B	0.2	

Approved By: Ady Padan Ph.D.

Date: 10/19/2022

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Departamento de Salud de Puerto Rico** Date: 10/19/22
Project Name: Oficinas Regionales/HAFI/Ant. Residencia Enfermeras Inspector: Elme Rivera
Address: Aguadilla, Puerto Rico XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
103	2nd Floor	Medicaid Office	Concrete	Light Green	Wall C	0.1	
104	2nd Floor	Medicaid Office	Concrete	Light Green	Wall D	0.2	
105	2nd Floor	Medicaid Office	Concrete	Light Cream	Baseboard	0.1	
106	2nd Floor	Diesel tank Area	Concrete	Brown	Dike Wall A	0.1	
107	2nd Floor	Generator Diesel tank Area	Concrete	Brown	Dike Wall B	0.2	
108	2nd Floor	Generator Diesel tank Area	Concrete	Brown	Dike Wall C	0.1	
109	2nd Floor	Generator Diesel tank Area	Concrete	Brown	Dike Wall D	0.2	
110	2nd Floor	Generator Diesel tank Area	Metal	Black	Tank	0.1	

Approved By: Ady Padan Ph.D. **Date: 10/19/2022**

AES International Inc.

Appendix IV

Selective Photos

General View of Oficinas regionales/ HAFI/Antigua Residencia de Enfrmeras, Aguadilla, Puerto Rico

Brown Ceramic Entrance Riser Painted with LBP Exterior, Stairs

**All positive findings are not part of scope of work listed under FEMA DISASTER 4339DR-PR and 4473DR-PR contract (Project #:95429, DI#151684).*

Selective Photos

White Ceramic Wall Tiles
Painted with LBP
Adjacent Mech Room- Janitor Room

White Ceramic Dike Side
Painted with LBP
Adjacent Mech Room- Janitor Room

AES International Inc.

ASBESTOS

TABLE OF CONTENTS

I. SUMMARY

A limited survey for Asbestos Containing Materials (ACM) was conducted by Analytical Environmental Services International (AES International), Inc. for Oficinas Regionales/HAFI/Antigua Residencia de Enfermeras located on 135 Jose de Diego Street, Aguadilla, Puerto Rico, 00603 (Project #:95429, DI#:151684). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The ACM limited inspection was conducted by Elme Rivera, a DRNA/AHERA certified asbestos building inspector. The scope of the survey included sampling and physical assessments of ACM suspected materials listed on FEMA Asbestos Checklist.

Six (6) samples were collected from suspected materials. Asbestos fibers were not detected in the samples collected. Consequently, ACM were not found in the specific areas investigated, as listed in the FEMA asbestos checklist.

1.0 INTRODUCTION

A limited survey for Asbestos Containing Materials (ACM) was conducted by Analytical Environmental Services International (AES International), Inc. for Oficinas Regionales/HAFI/Antigua Residencia de Enfermeras located on 135 Jose de Diego Street, Aguadilla, Puerto Rico, 00603 (Project #:95429, DI#:151684). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The ACM limited inspection was conducted by Elme Rivera, a DRNA/AHERA certified asbestos building inspector (see Appendix I for credentials). The scope of the survey included sampling and physical assessments of ACM suspected materials listed on FEMA Lead and Asbestos Checklist. The inspection was performed based on a modified AHERA protocol, according to the following scenario:

- The structure was divided in functional spaces.
- Visual inspection was performed using FEMA Asbestos checklist and DDD document to identify materials listed to be sampled.
- Samples were collected from suspected materials identified in FEMA's checklist.

Samples collected during the limited survey were sent to AES International Inc., a NVLAP accredited laboratory located in Santurce, Puerto Rico. Samples were analyzed by Polarized Light Microscopy method (PLM), in accordance to EPA recommended procedures. The samples are defined as asbestos containing materials (ACM) if they contain more than 1% asbestos.

2.0 GENERAL BACKGROUND

Asbestos was used in the construction industry from 1900 to 1989. It is still being used today in various products. The health effects of asbestos have been studied since the 1930's. More health studies have been conducted in asbestos than any other natural substance. The mere presence of asbestos containing materials does not necessary constitute a health hazard. However, when these materials become disturbed from building renovation, maintenance, or other every day activities that allow fibers to be released into the environment, a potential hazard does exist.

The relationship between exposure level and health risk is very complex. Although this relationship is not completely understood, asbestos exposure has been associated with various types of lung diseases including a debilitating lung disease called ASBESTOSIS; a rare cancer of chest called MESOTHELIOMA; and cancers of the esophagus, stomach, colon and other organs. Asbestosis is not fatal; it is however incurable. One who has it cannot breathe easily and physical activity becomes limited. MESOTHELIOMA is 100% fatal, as there is no cure. These diseases can be directly linked to asbestos because of the mineral particles that can be found in the lining of the lungs and stomach, since the body cannot absorb these minerals. Tests have determined that asbestos can cause

cancer, but scientists disagree on the amount of asbestos fibers that must be inhaled to cause cancer. The nose filters out all visible particles. Therefore, only the microscopic fibers are the one who cause the problems.

Studies indicate different health effect resulting from exposure to chrysotile asbestos versus exposure to the amphibole form of asbestos. The latter, which include tremolite, amosite, actinolite, anthophyllite and crocidolite have more significant health impact than chrysotile.

Some scientists cite studies concluding that is the size of the fibers deposited in the lungs that result in cancer. Long, thin fibers, greater than 8 microns in length and less than 0.25 microns in diameter show the highest potential of cancer development.

2.1 National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA's rules concerning the application, removal, and disposal of ACM, as well as manufacturing, spraying and fabricating of ACM were issued under the asbestos NESHAP regulation (U.S. EPA National Emission Standards for Hazardous Air Pollutants, 40 CFR 61 Subpart M, October 30, 1987). The asbestos NESHAP regulation governs asbestos demolition and renovation projects in all facilities. The NESHAP rule usually requires owners or operators to have all friable ACM removed before the building is demolished and may require its removal before renovation. If friable ACM shall be disturbed, the NESHAP rule may require appropriate work practices, or procedures for emission control. The rule states that any ACM, which may become friable, poses a potential hazard that should be addressed.

A revised NESHAP ruling was released on November 20, 1990, effective February 20, 1991 which includes as the responsibility of the owner, or operator, to "prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II non-friable ACM." (40 CFR, Part 61, National Emission Standards for hazardous Air Pollutants, Asbestos NESHAP Revision, Final Rule, November 20, 1990).

3.0 PROJECT IDENTIFICATION/DESCRIPTION

The area investigated consists of building materials shown in FEMA's Asbestos Check list and DDD list (when available). The lists are attached in Appendix II.

4.0 METHODS OF BUILDING INSPECTION

Each material was classified according to the condition of Asbestos Containing Materials (ACM) in that location and the potential for material disturbance. The materials listed in the FEMA's Asbestos Checklist were visually inspected and identified based on Photos provided and DDD List (see Appendix II).

5.0 SAMPLING METHODS

Six (6) samples were collected from suspected materials. Asbestos fibers were not detected in the samples collected. Consequently, ACM were not found in the specific areas investigated, as listed in the FEMA asbestos checklist.

6.0 INSPECTION RESULTS

Suspected materials were observed during visual inspection. Six (6) samples were collected and analyzed. Results are presented in Appendix IV. Asbestos fibers were not detected in the samples collected and analyzed.

7.0 CONCLUSIONS

A survey for ACM was conducted for Oficinas Regionales/HAFI/Antigua Residencia de Enfermeras located on 135 Jose de Diego Street in Aguadilla. No ACM were detected.

The ACM survey results do not include materials which are non-accessible, non-visible and may be present inside the walls, or covered by other materials. These materials must be assessed at the time of the disturbance and assumed as positive for the time being.

The ACM survey conducted did not address all suspected ACM present in the building but only materials listed by FEMA under the "FEMA Lead and Asbestos Checklist" and (when available) the Damage Description and Dimension (DDD) document. Consequently negative, or positive findings refer only to the areas and materials tested from selected locations.

Elme Rivera, DRNA Asbestos Inspector
Lic#: ASB-1221-0694-SI

AES International Inc.

Appendix I

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200051-0

AES International

Santurce, PR

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2022-01-01 through 2022-12-31

Effective Dates

For the National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AES International
611 Monserrate
Santurce, PR 00907
Mr. Ady Padan
Phone: 787-722-0220 Fax: 787-724-5788
Email: yota1@bellsouth.net
http://www.aesipr.org

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 200051-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Asbestos Inspector Credentials

TARJETA DE REGISTRO
PARA LA REMOCION DE ASBESTO

Esta tarjeta autoriza a:

Elme Rivera Pérez

Inspector

A trabajar en la remoción de asbesto en P.R. Esta persona NO es un empleado del DRNA.

ASB-1221-0694-SI

Número de Registro

19-Nov-2022

Fecha de vencimiento

Firma Autorizada - Departamento Recursos Naturales y Ambientales

AES International Inc.

Appendix II

Federal Emergency Management Agency
FEMA-4339-DR-PR

FEMA

Lead and Asbestos Checklist (428 Projects)

Oficinas Regionales / HAFF Agricolas / Apt. Residencia Trabajadores

Project #: 95429 **DI #:** 151684

(1) Does the facility meet one of the following criteria?

Asbestos		Lead	
◉	Building constructed before 1990 and a Construction Permit is triggered based on the below permit checklist	◉	Building constructed before 1978 and a Construction Permit is triggered based on the below permit checklist
○	Building constructed before 1990 and project requires a demolition permit	○	Building constructed before 1978 and a Demolition permit is required
○	Applicant has documentation confirming the presence of asbestos* Name of attachment:	○	Applicant has documentation confirming presence of lead paint * Name of attachment:
○	None This DI does not qualify for asbestos abatement estimating for 428 project	○	None This DI does not qualify for lead abatement estimating for 428 project

***Applicant must provide the result of a test or survey for the facility which confirms the presence of lead and/or asbestos and must also provide dimensions of the lead and/or asbestos**

(2) Review DDD to identify suspect materials

Lead		
Suspect Material	**Location in the Building (specify the room)**	**Quantity in the DDD**
Interior and Exterior Finishes		
Exterior/interior paint	Interior (1st and 2nd Floor), Exterior	18,621 SF
Ceramic Tile (Wall, Floor)		
Ceramic equipment (Bathtubs, Sinks)		
Metal components (Doors, Windows)	2nd Floor Hallway, Exterior	4 each exterior hollow aluminum door, 36 IN wide x 80 IN high
Fire retardant paint		
Other fire protection materials		
Roads and Bridges		
Road sign paints (Roads, Bridge Parapets)		
Traffic paint (Yellow, white, blue, etc.)		
Other		
Explain:		

Asbestos		
Suspect Material	**Location in the Building (specify the room)**	**Quantity in the DDD**
Roofing Materials		
Roof and nonroof coatings	[redacted]	9000 SF
Roofing felt		
Roofing stucco		
Roof panels		
Asphaltic, Bituminous, SBS, Mastic Sealant, polyolefins		
Interior and Exterior Finishes		
Vinyl floor tiles	1st and 2nd floors, interiors	349 SF
Vinyl floor tile glue/ adhesives		
Ceiling tiles	1st and 2nd floors	1,876 SF
Millboard		
Insulation		
Plasters		
Mastic		
Textured paints (simulated stucco)		
Block filler paints (masonry coating)		
Cement products		
Drywall		
Electrical/HVAC Components		
Duct and return pipeline wrapping		25.5 Linear Ft, 1.5 Inches wrapping
Boilers		
Sealants		
Extruded sealant tapes		
High-grade electrical paper		
Insulation for friction parts		
Insulation for furnaces and refrigerators		
Glues, Adhesives, Mastic, HVAC Asbestos Sealants		
Other		
Explain:		

AES International Inc.

Appendix III

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Departamento de Salud de Puerto Rico** Structure:

Project Name: Oficinas Regionales/HAFI/Antigua Residencia de Enfermeras, Aguadilla

Inspection Date: 10/19/2022 Page: 1 of 1

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
CDT-A-ER1	Light Gray Vinyl Floor Tile 12"x 12" from Room Adjacent to HVAC Mech Room, 2nd Floor	Misc.	No	NF	1st and 2nd Floor	ND		X	
CDT-A-ER2	Light Gray Vinyl Floor Tile 12"x 12" from Epidemiology Office	Misc.	No	NF	1st and 2nd Floor	ND		X	
CDT-A-ER3	Light Gray Vinyl Floor Tile 12"x 12" from Storage Adjacent to Front Facade, Balcony	Misc.	No	NF	1st and 2nd Floor	ND		X	
CDT-A-ER4	Ceiling Tile 2'x 4' from Conference Room	Misc.	No	NF	1st and 2nd Floor	ND		X	
CDT-A-ER5	Ceiling Tile 2'x 4' from Break Room	Misc.	No	NF	1st and 2nd Floor	ND		X	
CDT-A-ER6	Ceiling Tile 2'x 4' from Salud Ambiental Regional Office	Misc.	No	NF	1st and 2nd Floor	ND		X	

Inspected by: Elme Rivera Date: 10/19/2022

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged of significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

*** - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected**

AES International Inc.

Appendix IV

ANA ICAL ENVIRONMENTAL SERVICES INTERNA IAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907
PH. (787) 722-0220 Fax (787) 724-5788

NVLAP LAB CODE 200061-0
TESTING

Job ID: B22100025

REPORT NUMBER

RP22102402

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/19/2022
Project Name:	Antigua Residencia de Enfermeras / Oficinas Regisonales / HAFI	Date Received:	10/20/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID / Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100025.01 B22100025.01.A CDT-A-ER1 Layer % of Total :100%	Hard, Compact, Partly Granular with Fibers Other - and Black Mastic Pink	No		Cellulose 2 Synthetic 5	Bitumen 10 Sand/Aggregates 35 Binders/Paint 48
Date Analyzed: 10/20/2022 Sample Location: Light Gray Vinyl Floor Tile 12"x 12" from Room Adjacent to HVAC Mech Room, 2nd Floor Comments:					
B22100025.02 B22100025.02.A CDT-A-ER2 Layer % of Total :100%	Hard, Compact, Partly Granular with Fibers Other - and Black Mastic Pink	No		Cellulose 3 Synthetic 2	Bitumen 15 Sand/Aggregates 35 Binders/Paint 45
Date Analyzed: 10/20/2022 Sample Location: Light Gray Vinyl Floor Tile 12"x 12" from Epidemiology Office Comments:					
B22100025.03 B22100025.03.A CDT-A-ER3 Layer % of Total :100%	Hard, Compact, Partly Granular with Fibers Other - and Black Mastic Pink	No		Cellulose 2 Synthetic 1	Bitumen 5 Sand/Aggregates 35 Binders/Paint 57
Date Analyzed: 10/20/2022 Sample Location: Light Gray Vinyl Floor Tile 12"x 12" from Storage Adjacent to Front Façade, Balcony Comments:					
B22100025.04 B22100025.04.A CDT-A-ER4 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 25 Glass Fibers 10	Perlite 35 Expanded Glass 10 Binders/Paint 20

MICROANALYST: [Jessica Garcia]

QUALITY CONTROL: [Ady Padan Ph.D]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P... 00907
PH. (787) 722-0220 Fax (787) 724-5788

NVLAP LAB CODE 200051-0
TESTING

Job ID: B22100025

REPORT NUMBER

RP22102402

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/19/2022
Project Name:	Antigua Residencia de Enfermeras / Oficinas Regisonales / HAFI	Date Received:	10/20/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID / Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Date Analyzed: 10/20/2022 Sample Location: Ceiling Tile 2'x 4' from Conference Room Comments: Paint Included as Binders					
B22100025.05 B22100025.05.A CDT-A-ER5 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 25 Glass Fibers 10	Perlite 35 Expanded Glass 5 Binders/Paint 25
Date Analyzed: 10/20/2022 Sample Location: Ceiling Tile 2'x 4' from Break Room Comments: Paint Included as Binders					
B22100025.06 B22100025.06.A CDT-A-ER6 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 25 Glass Fibers 10	Perlite 35 Expanded Glass 5 Binders/Paint 25
Date Analyzed: 10/20/2022 Sample Location: Ceiling Tile 2'x 4' from Break Room Comments: Paint Included as Binders					

Comments:

For all heterogeneous and layered samples easily separated into sublayers, each component is analyzed and reported separately.

Samples are analyzed by PLM using dispersion staining techniques in accordance with US EPA methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

MICROANALYST: [Jessica Garcia]

QUALITY CONTROL: [Ady Padan Ph.D]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

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611 Monserrate, 2nd. Floor, Santurce, P.R. 00907
Ph: (787) 722-0220 Fax: (787) 724-5788

NVLAP®
NVLAP LAB CODE 200051-0
TESTING

Transmittal Sheet for Bulk Sample Analysis

Client Name: Departamento de Salud de Puerto Rico
Address:
Contact:
Phone/Fax:

Project Name: Antigua Residencia de Enfermeras/ Oficinas Regionales /HAFI
Site Location: Aguadilla, Puerto Rico
Samplers Name: Elme Rivera
Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
CDT-A-EH1	See Hard Asbestos	10/19/22	9:55	✓			B22100025 .01
CDT-A-EH2			9:56	✓			.02
CDT-A-EH3			9:59	✓			.03
CDT-A-EH4			10:10	✓			.04
CDT-A-EH5			10:15	✓			.05
CDT-A-EH6	See Hard Asbestos	10/19/22	10:19	✓			.06

Turnaround Time: Normal: ☐ Rush: ☒

Relinquished By:		**Delivered Directly to Lab:** ☐ **Shipped:** ☐	
Date/ Time:	10/20/22 10:10		
Received By:		**Method of Shipment:**	
Date/ Time:	10/20/22 10:00		
Relinquished By:		**Lab. Recipient:**	
Date/ Time:			
Received By:		**Date:**	
Date/ Time:			

*Job ID:B22100025
Departamento de Salud de Puerto Rico