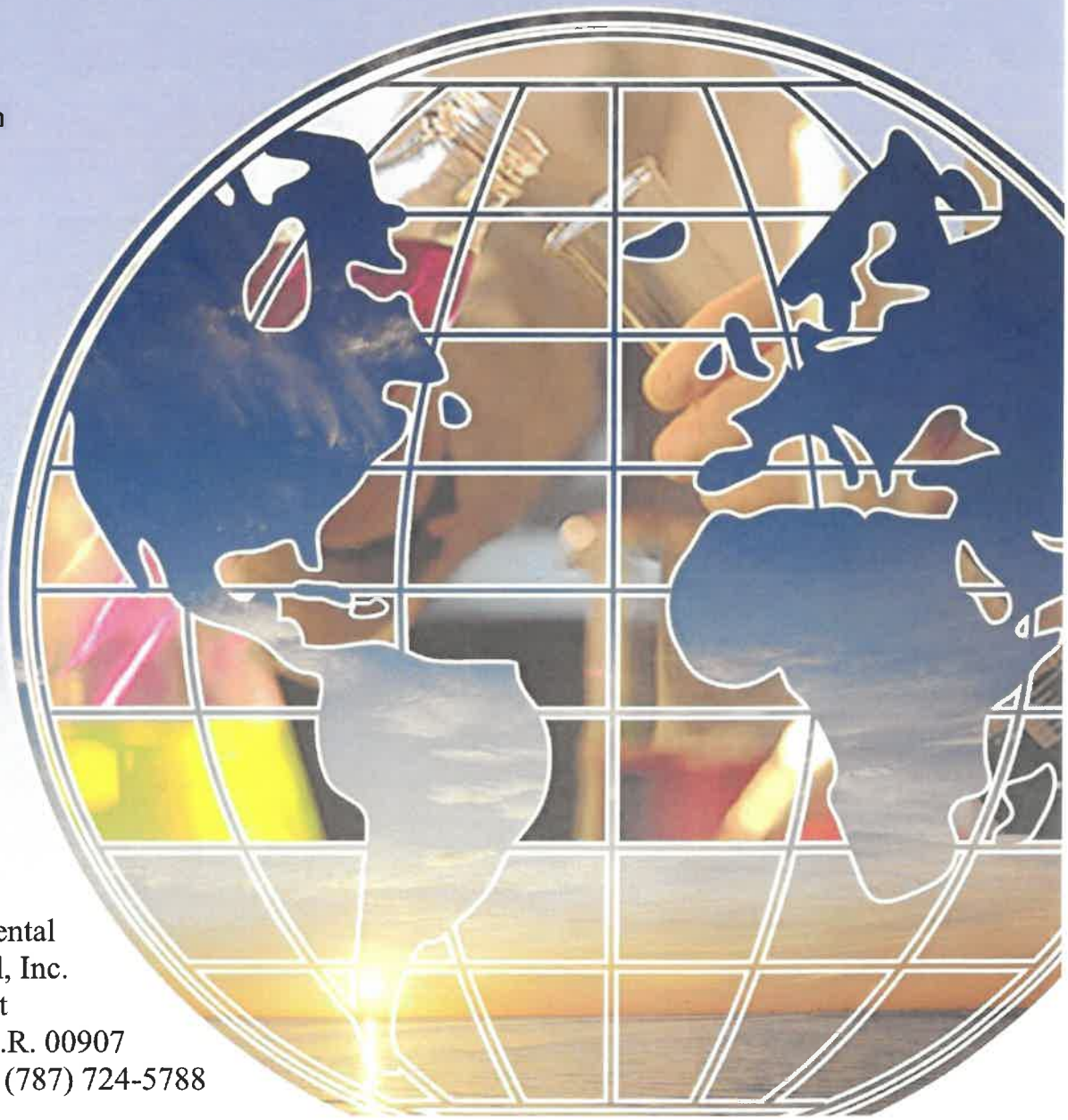
AES International Inc.

LIMITED ENVIRONMENTAL SURVEY
FOR
LEAD BASED PAINT (LBP)
AND
ASBESTOS CONTAINING MATERIALS (ACM)
FOR
DSPDI & REGISTRO DEMOGRAFICO
BAYAMON, 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

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I. SUMMARY

AES International was contracted to perform a limited LBP survey for DSPDI & Registro Demografico located on North of Km 8.26, Road PR-2, Juan Sanchez Ward, Bayamon, Puerto Rico (Project #:95399, DI#151642). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The LBP limited investigation was conducted by Elme Rivera, a certified DRNA lead risk assessor.

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

LBP components were not detected in the components tested.

1.0 INTRODUCTION

AES International was contracted to perform a limited LBP survey for DSPDI & Registro Demografico located on North of Km 8.26, Road PR-2, Juan Sanchez Ward, Bayamon, Puerto Rico (Project #:95399, DI#151642). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The investigation was conducted by Elme Rivera, an DRNA/EPA certified lead risk assessor. The credentials of AESI are attached in Appendix I. 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 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 calibration can be found in XRF Data from "Rehabilitacion Vocacional, Ponce" report.

The structures were divided in room equivalents and labeled accordingly (see Appendix II). One testing combination of similar components and four walls were tested for each room equivalent.

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.

4.0 RESULTS

The results of the tested components are shown in Appendix II. One hundred and fourteen (114) XRF readings were taken (see also summary). LBP components were not found.

5.0 CONCLUSIONS

A limited LBP survey was conducted for DSPDI & Registro Demografico located on North of Km 8.26, Road PR-2, Juan Sanchez Ward in Bayamon. No LBP components were detected.

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

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 Concrete Drywall Metal Plaster Wood	1.0 1.0 1.0 1.0 1.0 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)

Project #: 95399 **DI #:** 151642 **DSPDI & Registro Dem-Almacen Libros**

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

Asbestos		Lead	
X	Building constructed before 1990 and a Construction Permit is triggered based on the below permit checklist	X	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 asbestos abatement estimating for 428 project

(2) Review DDD to identify suspect materials

Lead		
Suspect Material	**Location in the Building (specify the room)**	**Quantity**
Interior and Exterior Finishes		
Exterior/interior paint	Interior and exterior	5,050 SF
Ceramic Tile (Wall, Floor)		
Ceramic equipment (Bathtubs, Sinks)		
Metal components (Doors, Windows)	interior	6 each
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**
Roofing Materials		
Roof and nonroof coatings	[redacted]	
Roofing felt		
Roofing stucco		
Roof panels		
Asphaltic, Bituminous, SBS, Mastic Sealant, polyolefins		
Interior and Exterior Finishes		
Vinyl floor tiles	Floor	105 SF
Vinyl floor tile glue/ adhesives		
Ceiling tiles	Interior	14,682 SF
Millboard		
Insulation		
Plasters	Exterior	50 SF
Mastic		
Textured paints (simulated stucco)		
Block filler paints (masonry coating)		
Cement products		
Drywall	Interior	8,086 SF
Electrical/HVAC Components		
Duct and return pipeline 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:		

Sectors Permit Checklist - Lead and Asbestos

Construction Permits

Is the project limited to one or more of the following activities and is not part of another work or major development? Select all that apply.

- ☐ Painting an existing building or structure
- ☐ Roof sealing/waterproofing
- ☐ Gardening/landscaping works
- ☐ Filling of cracks, leakages, and leaks in a building or structure
- ☐ Plaster of existing concrete works
- ☐ Installation or replacement of floor tile, wall tile, ceramic or any other floor or wall finish

○ Yes – Project does not trigger a Construction Permit for the purposes of lead/asbestos checklist.
◉ No – Project triggers a Construction Permit for the purposes of lead/asbestos checklist..

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**
Project Name: DSPDI & Registro Demográfico
Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
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	Third Floor	Main Corridor	Concrete	Cream	Wall A	0.1	
5	Third Floor	Main Corridor	Concrete	Cream	Wall B	0.2	
6	Third Floor	Main Corridor	Concrete	Cream	Wall C	0.1	
7	Third Floor	Main Corridor	Concrete	Cream	Wall D	0.1	
8	Third Floor	Main Corridor	Concrete	Gray	Baseboard	0.2	
9	Third Floor	Main Corridor	Concrete	White	Ceiling	0.1	
10	Third Floor	Archive 1	Metal	Gray	Door Frame	0.2	
11	Third Floor	Archive 1	Metal	Gray	Door	0.3	
12	Third Floor	Archive 1	Concrete	Cream	Wall A	0.1	
13	Third Floor	Archive 1	Concrete	Cream	Wall B	0.2	
14	Third Floor	Archive 1	Concrete	Cream	Wall C	0.1	
15	Third Floor	Archive 1	Concrete	Cream	Wall D	0.1	
16	Third Floor	Archive 1	Concrete	White	Ceiling	0.1	

Approved By: Ady Padan Ph.D.

Date: 10/26/2022

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LEAD BASED PAINT TESTING DATA SHEET

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Project Name: DSPDI & Registro Demográfico
Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
17	Third Floor	Archive 1	Concrete	Gray	Baseboard	0.2	
18	Third Floor	Archive 1	Metal	Red	Fire Hose Box	0.1	
19	Third Floor	Archive 1	Metal	White	Fire Hose Box	0.2	
20	Third Floor	Bathroom 1	Concrete	Cream	Upper Wall A	0.3	
21	Third Floor	Bathroom 1	Concrete	Cream	Upper Wall B	0.1	
22	Third Floor	Bathroom 1	Concrete	Cream	Upper Wall C	0.2	
23	Third Floor	Bathroom 1	Concrete	Cream	Upper Wall D	0.1	
24	Third Floor	Bathroom 1	Ceramic	Cream	Lower Wall A	0.2	
25	Third Floor	Bathroom 1	Ceramic	Cream	Lower Wall B	0.1	
26	Third Floor	Bathroom 1	Ceramic	Cream	Lower Wall C	0.2	
27	Third Floor	Bathroom 1	Ceramic	Cream	Lower Wall D	0.3	
28	Third Floor	Bathroom 1	Ceramic	Cream	Floor Tile	0.1	
29	Third Floor	National Archives	Concrete	Cream	Wall A	0.2	
30	Third Floor	National Archives	Concrete	Cream	Wall B	0.1	
31	Third Floor	Archive 1	Concrete	Cream	Wall C	0.3	
32	Third Floor	Archive 1	Concrete	Cream	Wall D	0.1	

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Address: Bayamón, Puerto Rico

Date: 10/26/22
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XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
33	Third Floor	Archive 1	Concrete	Cream	Joist	0.2	
34	Third Floor	Archive 1	Concrete	Gray	Baseboard	0.1	
35	Third Floor	National Archives 2	Concrete	Cream	Wall A	0.2	
36	Third Floor	National Archives 2	Concrete	Cream	Wall B	0.1	
37	Third Floor	National Archives 2	Concrete	Cream	Wall C	0.2	
38	Third Floor	National Archives 2	Concrete	Cream	Wall D	0.1	
39	Third Floor	National Archives 2	Concrete	Cream	Ceiling	0.3	
40	Third Floor	National Archives 2	Concrete	Gray	Baseboard	0.1	
41	Third Floor	National Archives 2	Concrete	Gray	Floor	0.2	
42	Third Floor	National Archives 1	Metal	Gray	Door Frame	0.1	
43	Third Floor	National Archives 1	Metal	Gray	Door	0.2	
44	Third Floor	National Archives 1	Concrete	Cream	Wall A	0.1	
45	Third Floor	National Archives 1	Concrete	Cream	Wall B	0.1	
46	Third Floor	National Archives 1	Concrete	Cream	Wall C	0.1	
47	Third Floor	National Archives 1	Concrete	Cream	Wall D	0.2	
48	Third Floor	National Archives 1	Concrete	White	Ceiling	0.1	

Approved By: Ady Padan Ph.D.

Date: 10/26/2022

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LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Departamento de Salud de Puerto Rico**
Project Name: DSPDI & Registro Demográfico
Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
49	Third Floor	National Archives 1	Concrete	Gray	Floor	0.2	
50	Third Floor	National Archives 1	Concrete	Gray	Baseboard	0.1	
51	Third Floor	Bathroom South	Concrete	White	Upper Wall A	0.1	
52	Third Floor	Bathroom South	Concrete	White	Upper Wall B	0.2	
53	Third Floor	Bathroom South	Concrete	White	Upper Wall C	0.1	
54	Third Floor	Bathroom South	Concrete	White	Upper Wall D	0.2	
55	Third Floor	Bathroom South	Concrete	White	Ceiling	0.1	
56	Third Floor	Bathroom South	Ceramic	Cream	Lower Wall A	0.1	
57	Third Floor	Bathroom South	Ceramic	Cream	Lower Wall B	0.2	
58	Third Floor	Bathroom South	Ceramic	Cream	Lower Wall C	0.1	
59	Third Floor	Bathroom South	Ceramic	Cream	Lower Wall D	0.2	
60	Third Floor	Bathroom South	Ceramic	Cream	Floor Tile	0.3	
61	Third Floor	Elevator Shaft	Concrete	Cream	Wall B	0.1	
62	Third Floor	Elevator Shaft	Concrete	Cream	Wall C	0.2	
63	Third Floor	Elevator Shaft	Concrete	Cream	Wall D	0.1	
64	Third Floor	Elevator Shaft	Metal	Black	Railing Door	0.2	

Approved By: Ady Padan Ph.D.

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Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
65	Third Floor	Elevator Shaft	Concrete	Cream	Ceiling	0.1	
66	Third Floor	Elevator Shaft	Concrete	Gray	Floor	0.2	
67	Third Floor	Elevator Shaft	Metal	Brown	Window Frame	0.1	
68	Third Floor	Elevator Shaft	Concrete	Cream	Window Sill	0.2	
69	Third Floor	Elevator Shaft	Metal	Gray	Door Frame	0.3	
70	Third Floor	Elevator Shaft	Metal	Gray	Door	0.1	
71	Third Floor	Elevator Shaft	Metal	Gray	Joist	0.1	
72	Third Floor	Bathroom Terrace	Metal	Gray	Door Frame	0.1	
73	Third Floor	Bathroom Terrace	Metal	Gray	Door	0.2	
74	Third Floor	Bathroom Terrace	Concrete	Cream	Upper Wall A	0.1	
75	Third Floor	Bathroom Terrace	Concrete	Cream	Upper Wall B	0.2	
76	Third Floor	Bathroom Terrace	Concrete	Cream	Upper Wall C	0.1	
77	Third Floor	Bathroom Terrace	Concrete	Cream	Upper Wall D	0.2	
78	Third Floor	Bathroom Terrace	Ceramic	Pink	Lower Wall A	0.1	
79	Third Floor	Bathroom Terrace	Ceramic	Pink	Lower Wall B	0.2	
80	Third Floor	Bathroom Terrace	Ceramic	Pink	Lower Wall C	0.1	

Approved By: Ady Padan Ph.D.

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Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
81	Third Floor	Bathroom Terrace	Ceramic	Pink	Lower Wall D	0.2	
82	Third Floor	Bathroom Terrace	Ceramic	Brown	Floor Tile	0.4	
83	Third Floor	Bathroom Terrace	Ceramic	White	Toilet	0.1	
84	Third Floor	Bathroom Terrace	Ceramic	White	Sink	0.2	
85	Third Floor	Exterior Stairs	Metal	Gray	Door Frame	0.1	
86	Third Floor	Exterior Stairs	Metal	Gray	Door	0.2	
87	Third Floor	Exterior Stairs	Metal	Gray	Handrail Right	0.1	
88	Third Floor	Exterior Stairs	Concrete	Gray	Riser	0.2	
89	Third Floor	Exterior Stairs	Concrete	Gray	Stringer	0.1	
90	Third Floor	Exterior Stairs	Metal	Gray	Handrail Left	0.1	
91	First Floor	Exterior	Concrete	Lt. Gray	Wall A	0.1	
92	First Floor	Exterior	Concrete	Lt. Gray	Wall B	0.2	
93	First Floor	Exterior	Concrete	Lt. Gray	Wall C	0.1	
94	First Floor	Exterior	Concrete	Lt. Gray	Wall D	0.1	
95	First Floor	Exterior	Concrete	Gray	Trim	0.2	
96	First Floor	Exterior	Concrete	Lt. Gray	Column	0.1	

Approved By: Ady Padan Ph.D.

Date: 10/26/2022

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: DSPDI & Registro Demográfico
Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
97	First Floor	Exterior	Concrete	Lt. Gray	Joist	0.2	
98	First Floor	Exterior	Concrete	Gray	Column	0.1	
99	First Floor	Exterior	Concrete	Lt. Gray	Divisory Wall	0.1	
100	First Floor	Exterior	Concrete	Lt. Gray	Divisory Wall	0.2	
101	Second Floor	Exterior Stairway Case	Concrete	Lt. Gray	Wall B	0.1	
102	Second Floor	Exterior Stairway Case	Concrete	Lt. Gray	Wall C	0.2	
103	Second Floor	Exterior Stairway Case	Concrete	Lt. Gray	Wall D	0.3	
104	Second Floor	Exterior Stairway Case	Concrete	Lt. Gray	Riser	0.1	
105	Second Floor	Exterior Stairway Case	Metal	Gray	Handrail	0.2	
106	Second to First Floor	Exterior Stairway Case	Metal	Gray	Door Frame	0.1	
107	Second to First Floor	Exterior Stairway Case	Metal	Gray	Door	0.2	
108	First to Second Floor	Center Stairway Case	Metal	Gray	Door Frame	0.1	
109	First to Second Floor	Center Stairway Case	Metal	Gray	Door	0.2	
110	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall A	0.1	
111	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall B	0.2	
112	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall C	0.1	

Approved By: Ady Padan Ph.D.

Date: 10/26/2022

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: DSPDI & Registro Demográfico
Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
113	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall D	0.2	
114	First to Second Floor	Center Stairway Case	Concrete	Gray	Riser	0.1	
115	First to Second Floor	Center Stairway Case	Concrete	Gray	Tread	0.2	
116	First to Second Floor	Center Stairway Case	Metal	Gray	Handrail	0.1	
117	First to Second Floor	Center Stairway Case	Concrete	Cream	Ceiling	0.1	
118					Calibration	1.0	
119					Calibration	1.1	
120					Calibration	1.0	
121	**RETESTING**						
122	First to Second Floor	Center Stairway Case	Metal	Gray	Door Frame	0.1	
123	First to Second Floor	Center Stairway Case	Metal	Gray	Door	0.2	
124	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall A	0.1	
125	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall B	0.2	
126	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall C	0.1	
127	First to Second Floor	Center Stairway Case	Concrete	Cream	Wall D	0.3	
128	First to Second Floor	Center Stairway Case	Concrete	Gray	Riser	0.1	

Approved By: Ady Padan Ph.D.

Date: 10/26/2022

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: DSPDI & Registro Demográfico
Address: Bayamón, Puerto Rico

Date: 10/26/22
Inspector: Elme Rivera
XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm^2)
129	First to Second Floor	Center Stairway Case	Concrete	Gray	Tread	0.2	
130	First to Second Floor	Center Stairway Case	Metal	Gray	Handrail	0.3	
131	First to Second Floor	Center Stairway Case	Concrete	Cream	Ceiling	0.1	
132					Calibration	1.0	
133					Calibration	1.1	
134					Calibration	1.0	

Approved By: Ady Padan Ph.D.

Date: 10/26/2022

AES International Inc.

Appendix IV

Selective Photos

General View of DSPDI & Registro Demografico
Bayamon, Puerto Rico

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 DSPDI & Registro Demografico located on North of Km 8.26, Road PR-2, Juan Sanchez Ward, Bayamon, Puerto Rico (Project #:95399, DI#151642). 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.

Nine (9) samples were collected from suspected materials specified in FEMA's list. Asbestos fibers were not detected in the samples collected.

Additional suspected materials were observed to be present in the buildings, outside of the FEMA's scope of work. These materials include HVAC with mastic, TSI Pipes, VFT with mastic, caulking and roofing material.

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 DSPDI & Registro Demografico located on North of Km 8.26, Road PR-2, Juan Sanchez Ward, Bayamon, Puerto Rico (Project #:95399, DI#151642). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The ACM limited inspection was conducted on 10/26/2022 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 DDD List (see Appendix II).

5.0 SAMPLING METHODS

Nine (9) samples were collected from suspected materials such as vinyl floor tiles with mastic, ceiling tiles and plaster. Asbestos fibers were not detected in the samples collected.

Additional suspected materials were observed to be present in the buildings, outside of the FEMA's scope of work. These materials include HVAC with mastic, TSI Pipes, VFT with mastic, caulking and roofing material.

6.0 INSPECTION RESULTS

Suspected materials were observed during visual inspection. Nine (9) 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 DSPDI & Registro Demografico located on North of Km 8.26, Road PR-2, Juan Sanchez Ward in Bayamon. 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

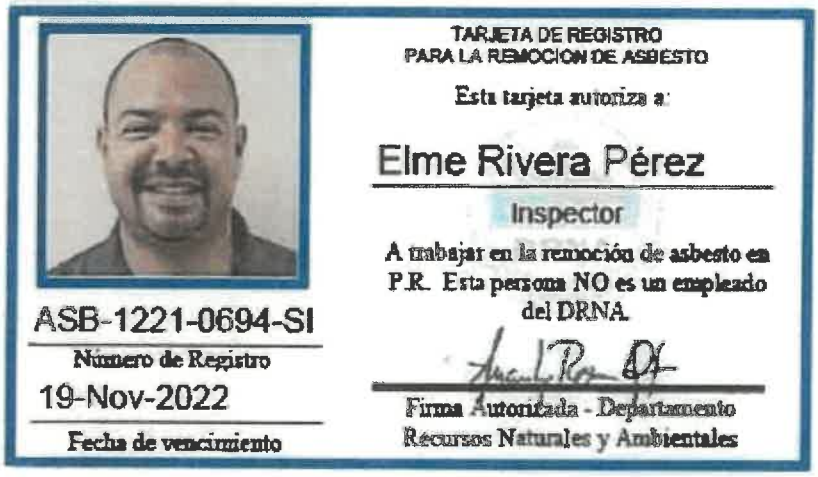
ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 200051-0

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

Lead and Asbestos Checklist (428 Projects)

Project #: 95399 **DI #:** 151642 **DSPDI & Registro Dem-Almacen Libros**

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

Asbestos		Lead	
X	Building constructed before 1990 and a Construction Permit is triggered based on the below permit checklist	X	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 asbestos abatement estimating for 428 project

(2) Review DDD to identify suspect materials

Lead		
Suspect Material	**Location in the Building (specify the room)**	**Quantity**
Interior and Exterior Finishes		
Exterior/interior paint	Interior and exterior	5,050 SF
Ceramic Tile (Wall, Floor)		
Ceramic equipment (Bathtubs, Sinks)		
Metal components (Doors, Windows)	interior	6 each
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**
Roofing Materials		
Roof and nonroof coatings	[redacted]	
Roofing felt		
Roofing stucco		
Roof panels		
Asphaltic, Bituminous, SBS, Mastic Sealant, polyolefins		
Interior and Exterior Finishes		
Vinyl floor tiles	Floor	105 SF
Vinyl floor tile glue/ adhesives		
Ceiling tiles	Interior	14,682 SF
Millboard		
Insulation		
Plasters	Exterior	50 SF
Mastic		
Textured paints (simulated stucco)		
Block filler paints (masonry coating)		
Cement products		
Drywall	Interior	8,086 SF
Electrical/HVAC Components		
Duct and return pipeline 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:		

Sectors Permit Checklist - Lead and Asbestos

Construction Permits

Is the project limited to one or more of the following activities and is not part of another work or major development? Select all that apply.

- ☐ Painting an existing building or structure
- ☐ Roof sealing/waterproofing
- ☐ Gardening/landscaping works
- ☐ Filling of cracks, leakages, and leaks in a building or structure
- ☐ Plaster of existing concrete works
- ☐ Installation or replacement of floor tile, wall tile, ceramic or any other floor or wall finish

○ Yes – Project does not trigger a Construction Permit for the purposes of lead/asbestos checklist.
◉ No – Project triggers a Construction Permit for the purposes of lead/asbestos checklist..

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** Building:

Project Name: DSPDI & Registro Demografico, Bayamon

Inspection Date: 10/26/2022 Page: 1 of 2

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								
RD-B-ER1	Cream Vinyl Floor Tile 12"x 12" with Mastic from Archives Area, 3rd Floor	Misc.	No	NF	1st, 2nd, 3rd Floor and Basement	ND		X	
RD-B-ER2	Cream Vinyl Floor Tile 12"x 12" with Mastic from Archives Area, 3rd Floor	Misc.	No	NF	1st, 2nd, 3rd Floor and Basement	ND		X	
RD-B-ER3	Ceiling Tile 2'x 4' from Basement Corridor	Misc.	No	F	1st, 2nd Floor and Basement	ND		X	
RD-B-ER4	Ceiling Tile 2'x 4' from 1st Floor	Misc.	No	F	1st, 2nd Floor and Basement	ND		X	
RD-B-ER5	Ceiling Tile 2'x 4' from Office Corridor Area, 1st Floor	Misc.	No	F	1st, 2nd Floor and Basement	ND		X	
RD-B-ER6	Cream Vinyl Floor Tile 12"x 12" with Mastic from Corridor, 1st Floor	Misc.	No	NF	1st, 2nd, 3rd Floor and Basement	ND		X	

Inspected by: Elme Rivera Date: 10/26/2022

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**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

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

Project Name: DSPDI & Registro Demografico, Bayamon

Inspection Date: 10/26/2022 Page: 2 of 2

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								
RD-B-ER7	Plaster from Exterior Back Stairway	Surf.	No	NF	All Building	ND		X	
RD-B-ER8	Plaster from Center Stairs (Middle)	Surf.	No	NF	All Building	ND		X	
RD-B-ER9	Plaster from Surface, Archives Area, 3rd Floor	Surf.	No	F	All Building	ND		X	
	3rd Floor area already remodeled, no gypsum samples were collected								

Inspected by: Elme Rivera Date: 10/26/2022

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

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

NVLAP LAB CODE 200051-0
TESTING

Job ID: B22100040

REPORT NUMBER

RP22110305

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/26/2022
Project Name:	DSPDI & Registro Demografico	Date Received:	10/27/2022
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
B22100040.01 B22100040.01.A RD-B-ER1 Layer % of Total :100%	Hard, Compact, Partly Granular with Fibers Other - and Black Mastic Cream	No		Cellulose 5	Bitumen 10 Sand/Aggregates 35 Binders/Paint 50
Date Analyzed: 10/27/2022 Sample Location: Cream Vinyl Floor Tile 12"x 12" with Mastic from Archives Area, 3rd Floor Comments:					
B22100040.02 B22100040.02.A RD-B-ER2 Layer % of Total :100%	Hard, Compact, Partly Granular with Fibers Other - and Black Mastic Cream	No		Cellulose 3	Bitumen 15 Sand/Aggregates 35 Binders/Paint 47
Date Analyzed: 10/27/2022 Sample Location: Cream Vinyl Floor Tile 12"x 12" with Mastic from Archives Area, 3rd Floor Comments:					
B22100040.03 B22100040.03.A RD-B-ER3 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic with Other - Paint Lt. Gray	No		Cellulose 25 Glass Fibers 10	Perlite 40 Binders/Paint 25
Date Analyzed: 10/27/2022 Sample Location: Ceiling Tile 2'x 4' from Basement Corridor Comments: Paint Included as Binders					
B22100040.04 B22100040.04.A RD-B-ER4 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic Other - with Paint Lt. Gray	No		Cellulose 25 Glass Fibers 15	Perlite 40 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.R. 00907
PH. (787) 722-0220 Fax (787) 724-5788

NVLAP LAB CODE 200051-0
TESTING

Job ID: B22100040

REPORT NUMBER

RP22110305

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/26/2022
Project Name:	DSPDI & Registro Demografico	Date Received:	10/27/2022
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: 10/27/2022 Sample Location: Ceiling Tile 2'x 4' from 1st Floor Comments: Paint Included as Binders					
B22100040.05 B22100040.05.A RD-B-ER5 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic Other - with Paint Lt. Gray	No		Cellulose 25 Glass Fibers 10	Perlite 50 Binders/Paint 15
Date Analyzed: 10/27/2022 Sample Location: Ceiling Tile 2'x 4' from Office Corridor Area, 1st Floor Comments: Paint Included as Binders					
B22100040.06 B22100040.06.A RD-B-ER6 Layer % of Total :100%	Hard, Compact, Partly Granular with Fibers Other - and Black Mastic Cream	No		Cellulose 2	Bitumen 10 Sand/Aggregates 35 Binders/Paint 53
Date Analyzed: 10/27/2022 Sample Location: Cream Vinyl Floor Tile 12"x 12" with Mastic from Corridor, 1st Floor Comments:					
B22100040.07 B22100040.07.A RD-B-ER7 Layer % of Total :100%	Semi-Hard, Silty with Perlite, Fibers Other - and Paint White	No		Cellulose 10	Perlite 50 Binders/Paint 40
Date Analyzed: 10/27/2022 Sample Location: Plaster from Exterior Back Stairway Comments:					

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.R. 00907
PH. (787) 722-0220 Fax (787) 724-5788

NVLAP LAB CODE 200051-8
TESTING

Job ID: B22100040

REPORT NUMBER

RP22110305

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/26/2022
Project Name:	DSPDI & Registro Demografico	Date Received:	10/27/2022
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
Paint Included as Binders					
B22100040.08 B22100040.08.A RD-B-ER8 Layer % of Total :100% Date Analyzed: 10/27/2022 Sample Location: Plaster from Center Stairs (Middle) Comments: Paint Included as Binders	Semi-Hard, Silty with Perlite, Fibers Other - and Paint White	No		Cellulose 10	Perlite 60 Binders/Paint 30
B22100040.09 B22100040.09.A RD-B-ER9 Layer % of Total :100% Date Analyzed: 10/27/2022 Sample Location: Plaster from Surface, Archives Area, 3rd Floor Comments: Paint Included as Binders	Semi-Hard, Glue White	No		Cellulose 3	Glue 77 Binders/Paint 20

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]

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

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: DSPDI & Registro Demografico
Site Location: Bayamón, 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		
RD-BEL1	See Hard Asbestos	10/26/22		✓			B22100040 .01
RD-BEL2				✓			.02
RD-BEL3				✓			.03
RD-BEL4				✓			.04
RD-BEL5				✓			.05
RD-BELC				✓			.06
RD-B-CL7				✓			.07
RD-B-CLS				✓			.08
RD-BEL9	See Hard Asbestos	10/26/22		✓			.09

Turnaround Time: Normal: ☐ Rush: ✓

Relinquished By:	
Date/ Time:	10/27/22/16:07
Received By:	
Date/ Time:	10/27/22 16:03
Relinquished By:	
Date/ Time:	
Received By:	
Date/ Time:	

Delivered Directly to Lab: ☐ **Shipped:** ☐

Method of Shipment:

Lab. Recipient:

Date:

*Job ID:B22100040

Departamento de Salud de Puerto Rico