TERRA Environmental

TO: GERALD MIERS
FACILITIES PROJECT SUPERVISOR
CALIFORNIA STATE UNIVERSITY
5151 STATE UNIVERSITY DRIVE
LOS ANGELES, CA 90032

LIMITED ASBESTOS SURVEY REPORT
King Hall – Room 1072-F

Date Prepared: May 25, 2018

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I. Executive Summary and Purpose

At the request of Mr. Gerald Miers of California State University Los Angeles facilities Department, Terra Environmental Services conducted a limited asbestos survey at King Hall. The Survey was authorized by Mr. Miers in acceptance of Terra Proposal for Asbestos Consulting Services.

II. Scope of services

The scope of this investigation included a visual inspection of King Hall – Room 1072F, digital photography of key observations, sample collection of suspect asbestos containing building materials with laboratory analysis of samples, and production of this written report of findings, conclusions, and recommendations.

The building materials included in this assessment are those expected to be impacted during the King Hall – Room 1072-F renovation project. In general, the renovation project will involve the disturbance of the Room 1072-F East Wall.

III. Visual Survey, Sampling Methodology, and Analytical Procedures

a. Visual Survey

The Visual Survey consisted of a walk-through and visual inspection of the affected building. It included the identification of all suspect asbestos containing materials and the physical touching of suspect ACBM in an effort to determine the friability and condition of said materials.

In surveying the building, we used our training in identifying asbestos-containing materials, our familiarity with building construction and our general experience to locate potential sources of ACM and ACCM.

This evaluation was performed in accordance with the Asbestos-Containing Materials in Buildings rule prepared by the U.S. EPA. Destructive sampling collection methods were used by Terra Environmental on site representatives. The asbestos building survey was performed by Mr. Ricardo Ayala, a California, Division of Occupational Safety and Health (DOSH)-Certified Site Surveillance Technician, CSST 16-5785 and Ms. Elnara Tagieva AHERA certified Asbestos Building Inspector on May 25, 2018.

b. Sampling Methodology

The next phase of the survey was the selection of sampling areas and collection of bulk samples. Material sampling areas were grouped based on material homogeneity. A homogeneous material is one, which contains the same texture, color, and uniform, applied during the same general time period. Terra employed destructive sampling

methods for the collection of bulk samples. All sampled materials were in good condition at the time of the inspection and sample collection.

c. Analytical Procedures

The PLM Method is the most commonly used method to analyze building materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in a given sample. The detection limit of the PLM method for asbestos identification is about one percent (1%) asbestos. Because the State of California recognizes asbestos-containing construction material (ACCM) as any material, which contains greater than or equal to one tenth of one percent (0.1%) asbestos, materials containing "trace" amounts of asbestos are reported by Terra Environmental as ACCM in the State of California.

Terra Environmental collected a total of three (3) bulk samples of suspect ACM. The samples were transferred following proper chain of custody protocol to AIH Laboratory, located at 2556 W Woodland Dr. Anaheim California, for analysis. AIH Laboratory is an accredited laboratory for bulk asbestos analysis under the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (Certification Number 500079-0). The samples were analyzed by Polarized Light Microscopy (PLM) with optical dispersion staining in accordance with the United States Environmental Protection Agency (EPA) Method (EPA 600/M4-82-020 per 40 CFR 763, subpart F, Appendix A).

IV. Discussion of Survey Findings and Recommendations

The visual inspection and bulk sample analysis results revealed the following Asbestos-Containing Materials:

Homogeneous Material	Location	Lab Sample Numbers	Asbestos detected	Quantity
Brown Mastic Puck	Room 1072 – F East Wall	180579501 180579502 180579203	Chrysotile 6%	55 SF

Recommendations for handling ACCM:

Removal and disposal of Asbestos containing materials **Brown Mastic Puck** must be performed by a California Licensed asbestos abatement contractor, in accordance with all applicable regulations, including but not limited to, 29 CFR 1926.1101 (OSHA), 40 CFR 763 (AHERA), 40 CFR Part 61 (NESHAPS) and 8 CAC 1529 (Cal/OSHA Asbestos), including mandatory and non-mandatory appendices as applicable, and Local Air Quality Management District regulations (SCAQMD 1403).

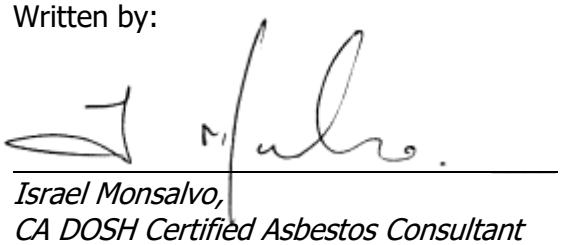
Should materials different to those identified in this report or, other forms of suspect hazardous materials be discovered during the renovation process, the contractor should

be instructed to cease all work activities which may initiate an exposure episode and notify the appropriate management personnel.

V. General Recommendations and Notes

Terra has endeavored to observe the exiting conditions within the subject property using generally accepted procedures. Regardless of the thoroughness of a survey, there is always a possibility some areas containing asbestos were overlooked or were inaccessible, or are different from those at specific sample locations. Therefore, conditions at every location may not be as anticipated by our field representative. In addition, demolition may uncover altered or differing conditions.

Written by:



Israel Monsalvo,
CA DOSH Certified Asbestos Consultant
CAC #04-3551
Terra Environmental Services

VI. Confidentiality and Limitations

This report has been prepared for the sole use of California State University. Material quantities are, in some cases, listed within this document. Those quantities are not intended to be used for removal bidding purposes. This document also is not intended as a contract manual; work methods and sequence, coordination of participants, applicable codes, engineering controls, required submittals and notifications should in all cases be addressed in a separate and independent bidding and contract document.

PHOTOGRAPHS

King Hall – Room 1072-F



Asbestos containing Brown Mastic Puck

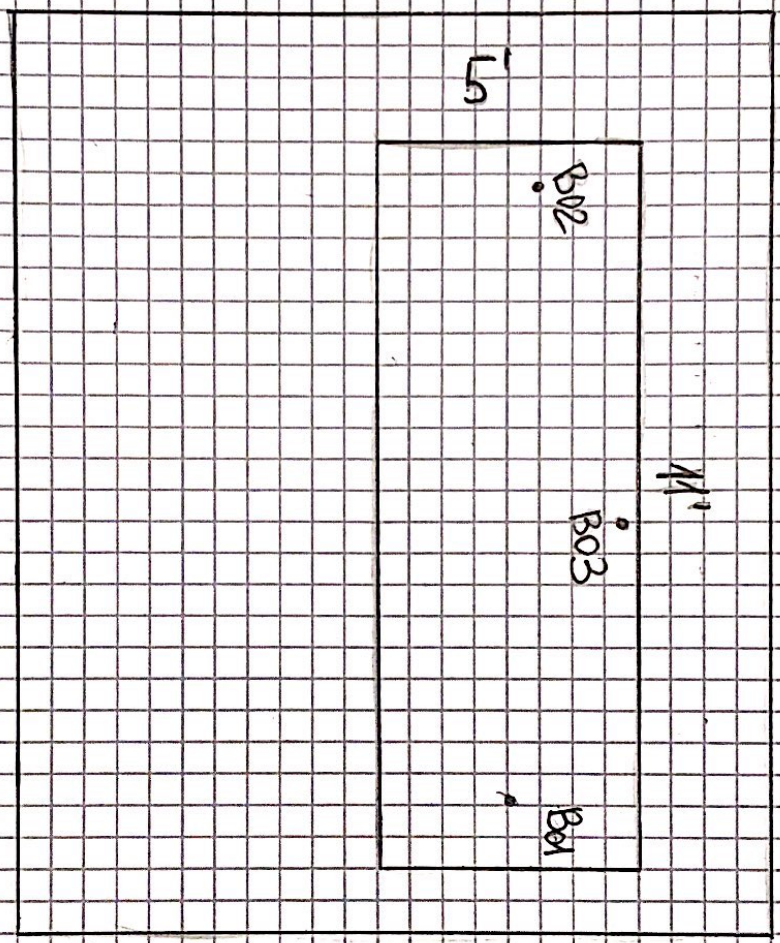
ATTACHMENTS

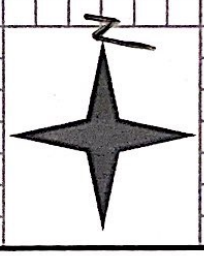
Terra
Environmental

Poject # 71293
Date: 5/25/18
Type of Work: #5.

Customer -
Project Name: Asbestos Survey-
Project Adress: CalState-LA, King Hall, Room 1072 F

East Wall of room 1072 F





12631 Imperial Hwy Suite A225 Santa Fe Springs, CA 90670
Tel 562/868-3777 - Fax 562/868-3778 www.terraeng.com

Scanned with CamScanner

AIH LABORATORY
2556 W Woodland Dr Anaheim, CA 92801

BULK ASBESTOS FIBER ANALYSIS

NVLAP TESTING
NVLAP LAB CODE 500079-0
Phone:(562) 860-2201
www.aihlab.com

Client Name: Terra Environmental
Project Manager: Ulises Monsalvo
Client Address: 12631 Imperial Hwy Ste A225 Santa Fe Springs, CA 90670
Client Job Number: 71293
Client Job Location: Cal State - LA King Hall Room 1072-F

Batch Number: 1805795
Total Samples Submitted: 3
Total Samples Analyzed: 3
Analysis Method: EPA Method 600/R-93-116

Lab ID: 180579501			**Client ID:** B01	
Layer	Layer Description	**Asbestos Type %**	Other Fibrous Material %	Other Non Fibrous Material
1.	Brown mastic	**Chrysotile 6%**	Cellulose <1%	Mastic/Binder

Lab ID: 180579502			**Client ID:** B02	
Layer	Layer Description	**Asbestos Type %**	Other Fibrous Material %	Other Non Fibrous Material
1.	Brown mastic	**Chrysotile 6%**	Cellulose <1%	Mastic/Binder

Lab ID: 180579503			**Client ID:** B03	
Layer	Layer Description	**Asbestos Type %**	Other Fibrous Material %	Other Non Fibrous Material
1.	Brown mastic	**Chrysotile 6%**	Cellulose <1%	Mastic/Binder

Analyzed by: Brian Fullaway **Signature:** **Date:** 05-25-2018

Reviewed by: Francisco Moreno **Signature:** **Date:** 05-25-2018

Limit of Quantification ("LOQ")=1%. <1% denotes presence of asbestos below LOQ. If the sample was not collected by AIH Laboratory then the accuracy of the results is limited by the methodology and experience of the sample collecter. Liability limited to cost of samples analysis. This report shall not be reproduced except in full, without written approval of AIH Laboratory. It shall not be used to claim product endorsement by NVLAP or any other agency of the government. Reported results relate only to the samples tested and may not be the representative of the sample area. AIH Laboratory shall dispose of the Customer's samples 30 days after receiving the samples unless instructed to store them for an alternate period of time in writing.

TERRA ENVIRONMENTAL

1805795

Job Name - Location - Job Number #71293	Billing Info:
CalState - LA	Terra Environmental Services Inc.
King Hall	Technician: Elnara Taffera
Room 1072-F	12631 Imperial Hwy Suite A225, Santa Fe Springs CA 90760
	Email: israel@terraeng.com/ulises@terraeng.com

Sample Analysis:	PLM – Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy	TAT	2 Hrs

ID #	Material Description	HM	Location of Sample	Condition	Friable	Quantity
B01	Brown Mastic Puck	0.1	Room 1072-F East Wall S.	Good	NO	55'
B02	↓	↓	N.	↓	↓	↓
B03	↓	↓	E.	↓	↓	↓

Notes	

Relinquished By:	Date & Time
Received By:	**Date & Time**
Celina	5/25/18 12:03

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 500079-0

AIH Laboratory

Cerritos, CA

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 17025:2005. 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).

2017-10-01 through 2018-09-30

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AIH Laboratory
12611 Hiddencreek Way, Suite B
Cerritos, CA 90703
Mr. Zubair M. Ahmed
Phone: 206-979-1415
Email: bestoflive@live.com
http://www.aihlabs.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 500079-0**

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 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

TERRA ENVIRONMENTAL

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant



Israel Monsalvo
Name

Certification No. 04-3551

Expires on 05/20/19

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate



Certificate Type	Expiration Date
Inspector/Assessor	09/01/2018
Project Monitor	09/01/2018

17622

Israel Monsalvo ID #: 9699

Israel Monsalvo, CAC, CDPH-I/A & PM
Cal/OSHA-Certified Asbestos Consultant #04-3551
California Department of Public Health-Certified I/A, PM # 9699

12631 Imperial Hwy Suite A225. Santa Fe Springs, CA 90670
www.terraeng.com

TERRA ENVIRONMENTAL


State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Ricardo Ayala
Name

Certification No. 16-5785

Expires on 11/16/17

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.


State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type

Expiration Date

Supervisor 08/08/2017

Sampling Technician 08/08/2017

270811

Ricardo Ayala

ID #: 27455

Ricardo Ayala CSST, CDPH ST
Cal/OSHA-Certified Site Surveillance Technician 16-5785
California Department of Public Health-Certified ST # 27455