

August 22, 2019

#### JAMES BULLOCK DEAN, SCHOOL OF PHYSICAL SCIENCES

RE: June 2019 Air Monitoring Report for Rowland Hall

Dear Dean Bullock.

The attached report from Omega Environmental, dated August 14, 2019, provides air monitoring results for Rowland Hall during asbestos-related activities during the period of June 13 through June 19, 2019 on the first floor, Rooms 101 and 104.

We have reviewed the report, including the air sample measurements. Based on our review, the air sample data has been determined to meet the Environmental Protection Agency (EPA) clearance criteria of 0.01 fibers per cubic centimeters of air (f/cc), which means the air quality in public spaces met or exceeded all applicable standards.

If you have any questions regarding the environmental health and safety of Rowland Hall, please don't hesitate to contact me via phone (949.824.4817) or email (amsamala@uci.edu). After hours calls may be directed to 949.824.6200.

If you have any questions regarding the construction activities in Rowland Hall, please contact Design and Construction Services Senior Project Manager Chris Schneider via email (jcshne1@uci.edu).

We look forward to a safe and successful completion of the Rowland Hall fire life safety improvement project. Please let us know if you have any questions.

Sincerely,

Alvin Samala

Manager, Industrial Hygiene, Chemical Safety, and Environmental Health Environmental Health and Safety

Attachment



Asbestos Air Monitoring Summary Report University of California, Irvine Rowland Hall – 1<sup>st</sup> Floor Rooms 101 and 104 Irvine, California 92618

> Project Number 2019-2285UCI August 14, 2019

Prepared For:

Susan Robb University of California, Irvine 4600 Health Science Road Irvine, California 92697 Prepared By:

Steve Rosas

Navid Salari Omega Environmental Services 4570 Campus Drive, Suite 30 Newport Beach, California 92660

\_\_\_\_\_ Navid Salari

Sr. Project Manager, CAC #94-1597

Senior Project Manager

Principal, CAC #92-0284



	TABLE OF CONTENTS				
1.	EXECUTIVE SUMMARY	1			
2.	AIR SAMPLE RESULTS	1			

### ATTACHMENT A

PCM Air Sample Results, Daily Notes and Inspectors' Certifications



#### 1. EXECUTIVE SUMMARY

The following is an air monitoring summary report for the Rowland Hall, 1<sup>st</sup> Floor Fire Life Safety (FLS) Project. The areas included are Rooms 101 and 104 located at the University of California, Irvine (UCI) in Irvine California. The abatement contractor scope of work consisted of the following asbestos related activities:

- Work area preparation;
- Removal of non-asbestos ceiling tiles;
- Clean-up of asbestos-containing debris on ceiling tiles as well as assistance during the installation of an upgraded fire sprinkler system; and
- Spot removal of asbestos-containing above ceiling materials as necessary.

Project oversight and air monitoring was performed by Christopher Canas, a California Certified Site Surveillance Technician (CSST #16-5978) and Jesse Sanchez, an EPA-AHERA¹ Building Inspector and Asbestos Abatement Contractor Supervisor, with Omega Environmental Services, Inc. (Omega). The above activities were performed from June 13 to 19, 2019. The monitoring was performed at the direction of UCI Environmental Health and Safety (EH&S) and managed by Navid Salari, a California Certified Asbestos Consultant (CAC# 94-1557) with Omega. Attachment A includes copies of the air sample results, daily notes and inspectors' certifications.

#### 2. AIR SAMPLE RESULTS

Perimeter and clearance air samples were collected during and at the completion of the asbestos related activities. The purpose of the area air monitoring was to measure the airborne fiber concentrations outside the containments to determine the effectiveness of the isolation methods employed during the asbestos related activities. Clearance air samples were collected inside the work areas following the completion of the asbestos related activities.

Analyses were performed using the Phase Contrast Microscopy (PCM) analytical methodology as described in National Institute for Occupational Safety and Health (NIOSH) 7400 A protocol. Omega's representatives are NIOSH-582<sup>2</sup> certified and analyzed the collected air samples at the site. Table 1 provides a summary of the air sample results:

Table 1 - Air Sample Results

Date	Sample #	Sample Locations / Work Activity	Result (f/cc)
06/13-14/19	01	1 <sup>st</sup> floor, outside work area, lecture hall 104 by decontamination room / Ceiling tiles demolition and cleanup	0.003
06/13-14/19 02		1 <sup>st</sup> floor, outside work area, lecture hall 104 by decontamination room / Ceiling tiles demolition and cleanup	< 0.002

<sup>&</sup>lt;sup>1</sup> Asbestos Hazard Emergency Response Act

<sup>&</sup>lt;sup>2</sup> NIOSH-582 or equivalent – Individual trained to analyze samples by Phase Contrast Microscopy



Date	Sample #	Sample Locations / Work Activity	Result (f/cc)
06/13-14/19	03	1 <sup>st</sup> floor, outside work area, lecture hall 104, negative air machine/ Ceiling tiles demolition and cleanup	0.006
		Cenning thes demonation and cleanup	
06/14-15/19	01	1 <sup>st</sup> floor, outside work area by decontamination room, lecture hall 101 / Ceiling tiles demolition and cleanup	< 0.002
06/14-15/19	02	1st floor, outside work area by decontamination room, lecture hall 101 / Ceiling tiles demolition and cleanup	< 0.002
06/14-15/19	03	1 <sup>st</sup> floor, outside work area by decontamination, lecture hall 101 / Ceiling tiles demolition and cleanup	0.003
		Centing thes demonstrate and cleanup	
06/15-16/19	01	1st floor, outside work area, by decontamination room, lecture hall 104 / Ceiling tile demolition, cleaning and spot abatement	< 0.002
06/15-16/19	02	1st floor, outside work area, by decontamination room, lecture hall 104 / Ceiling tile demolition, cleaning and spot abatement	< 0.002
06/15-16/19	03	1 <sup>st</sup> floor, outside work area, negative air exhaust, lecture hall 104 / Ceiling tile demolition, cleaning and spot abatement	0.005
06/15-16/19	04	1st floor, outside work area, by decontamination room, lecture hall 101 / Ceiling tile demolition, cleaning and spot abatement	< 0.002
06/15-16/19	05	1st floor, outside work area, by decontamination room, lecture hall 101 / Ceiling tile demolition, cleaning and spot abatement	0.003
06/15-16/19	06	1st floor, outside work area, negative air exhaust, lecture hall 101 / Ceiling tile demolition, cleaning and spot abatement	0.004
06/17-18/19	01	1 <sup>st</sup> floor, outside work area, by decontamination room, lecture hall 104 / Installing ceiling tiles and pipes	<0.002
06/17-18/19	02	1 <sup>st</sup> floor, outside work area, hallway, lecture hall 104 / Installing ceiling tiles and pipes	< 0.002
06/17-18/19	03	1 <sup>st</sup> floor, outside work area, negative air machine, lecture hall 104 / Installing ceiling tiles and pipes	< 0.002
06/17-18/19	04	1 <sup>st</sup> floor, outside work area, by decontamination room, lecture hall 101 / Installing ceiling tiles and pipes	
06/17-18/19	05	1 <sup>st</sup> floor, outside work area, hallway, lecture hall 101 / Installing ceiling tiles and pipes	< 0.002
06/17-18/19 06		1 <sup>st</sup> floor, outside work area, negative air machine, lecture hall 101 / Installing ceiling tiles and pipes	0.003
06/18-19/19	01	1 <sup>st</sup> floor, outside work area, hallway by decontamination room, room 104 / Cleaning work area	<0.002
06/18-19/19	02	1 <sup>st</sup> floor, outside work area, hallway, room 104 / Cleaning work area	<0.002
06/18-19/19	03	1 <sup>st</sup> floor, outside work area, negative air exhaust, room 104 / Cleaning work area	0.003
06/18-19/19	04	1st floor, outside work area, hallway by decontamination room, room 101/ Cleaning work area	< 0.002
06/18-19/19	05	1st floor, outside work area, by decontamination room, room 101 / Cleaning work area	<0.002
06/18-19/19	06	1 <sup>st</sup> floor, outside work area, negative air exhaust, room 101 / Cleaning work area	< 0.002
06/19/19	01	1st floor, room 101, inside work area, NW corner / Air clearance	0.004
06/19/19	02	1 <sup>st</sup> floor, room 101, inside work area, NE corner / Air clearance	0.004
06/19/19	03	1 <sup>st</sup> floor, room 101, inside work area, SW corner / Air clearance	0.004
06/19/19	04	1st floor, room 101, inside work area, SE corner / Air clearance	0.003
06/19/19	05	1 <sup>st</sup> floor, room 101, inside work area, center area / Air clearance	0.003
00.17,17	Ü.5	- 1001, 10011 101, Illiand off area, control area, 1111 ciculation	3.005



Date	Sample #	Sample Locations / Work Activity	Result (f/cc)
06/19/19	07	1st floor, room 104, inside work area, NE corner / Air clearance	0.005
06/19/19	08	1st floor, room 104, inside work area, SW corner / Air clearance	0.005
06/19/19	09	1st floor, room 104, inside work area, SE corner / Air clearance	0.004
06/19/19	10	1st floor, room 104, inside work area, center area / Air clearance	0.004

f/cc – Fibers per cubic centimeter

Based on the results of the PCM analyses, all samples were found to contain fiber concentrations less than the EPA Clearance Criteria of  $0.01~\rm f/cc$ .



Attachment A

Assested Assatement Am Monitoring Data (1 CM)				
Project Number:	2019-3385UCI			
Project Site Address:	Rowland Hall, 1st floor			
Sample Date:	6/13 - 6/14/19			
Analysis type:	PCM (NIOSH 7400A)	OMEGA		
Analysis by:	Jesse Sanchez	ENVIRONMENTAL		
Date Analyzed:	6/14/19			

Sample ID: 01	Start time: 0300	End time: 0500
Sample location: 1 <sup>st</sup> floor – Outside work area	Flow rate (LPM): 10	
Lecture hall 104 by Decontamination room	Total time: 120	Total volume: 1200
Work activity: ceiling tiles demolition + cleanup	No of fibers: 7	No of fields: 100
	Airborne fiber concentrati	on (fibers/cc): 0.003
Other comments:		

Sample ID: 02	Start time: 0300	End time: 0500
Sample location: 1st floor - Outside work area	Flow rate (LPM): 10	
lecture hall 104 by decontamination room	Total time: 120	Total volume: 1200
Work activity: ceiling tiles demolition + cleanup	No of fibers: 4.5	No of fields: 100
	Airborne fiber concentration	n (fibers/cc): <0.002
Other comments:		

Sample ID: 03	Start time: 0305	End time: 0505		
Sample location: 1 <sup>st</sup> floor – Outside work area	Flow rate (LPM): 10			
Negative air machine exhaust, lecture hall 104	Total time: 120	Total volume: 1200		
Work activity: ceiling tiles demolition + cleanup	No of fibers: 14.5	No of fields: 100		
Airborne fiber concentration (fibers/cc): 0.006				
Other comments:				

Sample ID: 04	Start time: *	End time: *
Sample location: Field blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity: None	No of fibers: 0	No of fields: 100
Airborne fiber concentration (fibers/cc): 0		
Other comments:		

Sample ID: 05	Start time: *	End time: *	
Sample location: Sealed blank	Flow rate (LPM): *		
	Total time: *	Total volume: *	
Work activity: None	No of fibers: 0	No of fields: 100	
Airborne fiber concentration (fibers/cc): 0			
Other comments:			

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
Airborne fiber concentration (fibers/cc):		entration (fibers/cc):
Other comments:		·

Sample name (print)	: Jesse Sanchez	
Signature	: Jesse Sanchez	Page1 of1

Project Number:	2019-3385UCI	
Project Site Address:	Rowland Hall, 1st floor	
Sample Date:	6/14 - 6/15/19	
Analysis type:	PCM (NIOSH 7400A)	<b>OMEGA</b> ENVIRONMENTAL
Analysis by:	Jesse Sanchez	ENVIRONMENTAL
Date Analyzed:	6/15/19	

Sample ID: 01	Start time: 0100	End time: 0300
Sample location: 1st floor – Outside work area	Flow rate (LPM): 10	
lecture hall 101 by Decontamination room	Total time: 120	Total volume: 1200
Work activity: ceiling tile demolition + clean	No of fibers: 2.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 02	Start time: 0100	End time: 0300
Sample location: 1 <sup>st</sup> floor - Outside work area	Flow rate (LPM): 10	
lecture hall 101 by decontamination room	Total time: 120	Total volume: 1200
Work activity: ceiling tile demolition + clean	No of fibers: 3	No of fields: 100
	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 03	Start time: 0110	End time: 0310
Sample location: 1 <sup>st</sup> floor – outside work area	Flow rate (LPM): 10	
Negative air machine exhaust, lecture hall 101	Total time: 120	Total volume: 1200
Work activity: ceiling tile demolition + clean	No of fibers: 7.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.003	
Other comments:		

Sample ID: 04	Start time: *	End time: *
Sample location: Field blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity: None	No of fibers: 0	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0	
Other comments:		

Sample ID: 05	Start time: *	End time: *
Sample location: Sealed blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity: None	No of fibers: 0	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0	
Other comments:		

Sample ID:	Start time:	End time:	
Sample location:	Flow rate (LPM):		
	Total time:	Total volume:	
Work activity:	No of fibers:	No of fields:	
	Airborne fiber conc	Airborne fiber concentration (fibers/cc):	
Other comments:			

Sample name (print)	: Jesse Sanchez	
Signature	: Jesse Sanchez	Page1 of1

1150	estos ributement rin momtoring butu (1 em)	
Project Number:	2019-3385UCI	
Project Site Address:	Rowland Hall, 1st floor	
Sample Date:	6/15 – 16/19	
Analysis type:	PCM (NIOSH 7400A)	<b>OMEGA</b> ENVIRONMENTAL
Analysis by:	Jesse Sanchez	ENVIRONMENTAL
Date Analyzed:	6/16/19	

Sample ID: 01	Start time: 2200	End time: 2400
Sample location: 1 <sup>st</sup> floor – Outside work area	Flow rate (LPM): 10	
Decontamination room, lecture hall 104	Total time: 120	Total volume: 1200
Work activity: Demolition ceiling tiles, cleaning +	No of fibers: 1.5	No of fields: 100
spot Abatement	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 02	Start time: 2200	End time: 2400
Sample location: 1st floor - Outside work area	Flow rate (LPM): 10	
by decontamination room, lecture hall 104	Total time: 120	Total volume: 1200
Work activity: Demolition ceiling tiles, cleaning +	No of fibers: 3	No of fields: 100
spot Abatement	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 03	Start time: 2210	End time: 2410
Sample location: 1 <sup>st</sup> floor – Outside work area	Flow rate (LPM): 10	
Negative air machine exhaust, lecture hall 104	Total time: 120	Total volume: 1200
Work activity: Demolition ceiling tiles, cleaning +	No of fibers: 11.5	No of fields: 100
spot Abatement Airborne fiber concentration (fibers/cc): 0.005		on (fibers/cc): 0.005
Other comments:		

Sample ID: 04	Start time: 0210	End time: 0410
Sample location: 1 <sup>st</sup> floor – Outside work area	Flow rate (LPM): 10	
by Decontamination room, lecture hall 101	Total time: 120	Total volume: 1200
Work activity: Demolition ceiling tiles, cleaning +	No of fibers: 5	No of fields: 100
spot Abatement	Airborne fiber concentration	on (fibers/cc): <0.002
Other comments:		

Sample ID: 05	Start time: 0210	End time: 0410
Sample location: 1 <sup>st</sup> floor – Lecture hall 101	Flow rate (LPM): 10	
Outside decontamination room	Total time: 120	Total volume: 1200
Work activity: Demolition ceiling tiles, cleaning +	No of fibers: 7.5	No of fields: 100
spot Abatement Airborne fiber concentration (fibers/cc): 0.003		
Other comments:		

Sample ID: 06	Start time: 0220	End time: 0420
Sample location: 1st floor – Lecture hall 101	Flow rate (LPM): 10	
Negative air machine exhaust	Total time: 120	Total volume: 1200
Work activity: Demolition ceiling tiles, cleaning +	No of fibers: 10	No of fields: 100
spot Abatement	Airborne fiber concentration	on (fibers/cc): 0.004
Other comments:		

Sample name (print)	: Jesse Sanchez				
Signature	: Jesse Sanchez	Page _	1	_ of	_2

1 150	estos ributement rin monitoring butu (1 em)	
Project Number:	2019-3250UCI	
Project Site Address:	Rowland Hall	
Sample Date:	6/15 - 6/16/19	
Analysis type:	PCM (NIOSH 7400A)	OMEGA ENVIRONMENTAL
Analysis by:	Jesse Sanchez	ENVIRONMENTAL
Date Analyzed:	6/16/19	

Sample ID: 07	Start time: *	End time: *
Sample location: Field blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity: None	No of fibers: 0	No of fields: 100
	Airborne fiber conce	ntration (fibers/cc): 0
Other comments:		

Sample ID: 08	Start time: *	End time: *
Sample location: Sealed blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity: None	No of fibers: 0	No of fields: 100
	Airborne fiber concentrati	ion (fibers/cc): 0
Other comments:		

Sample name (print)	: Jesse Sanchez	
Signature	: Jesse Sanchez	Page2 of2

rispestos ributement rin violitoring Duta (1 Civi)		
Project Number:	2019-3385UCI	
Project Site Address:	Rowland Hall - 1st floor, Rooms 101 & 104	
Sample Date:	6/17 – 6/18/19	
Analysis type:	PCM (NIOSH 7400A)	<b>OMEGA</b> ENVIRONMENTAL
Analysis by:	Jesse Sanchez	ENVIRONMENTAL
Date Analyzed:	6/18/19	

Sample ID: 01	Start time: 2220	End time: 2420
Sample location: 1st floor – Outside work area	Flow rate (LPM): 10	
by Decontamination room, lecture hall 104	Total time: 120	Total volume: 1200
Work activity: Installing ceiling tiles + pipes	No of fibers: 3.5	No of fields: 100
	Airborne fiber concentrati	on (fibers/cc): <0.002
Other comments:		

Sample ID: 02	Start time: 2220	End time: 2420
Sample location: 1 <sup>st</sup> floor - Outside work area	Flow rate (LPM): 10	
hallway, lecture hall 104	Total time: 120	Total volume: 1200
Work activity: Installing ceiling tiles + pipes	No of fibers: 1.5	No of fields: 100
	Airborne fiber concentratio	n (fibers/cc): <0.002
Other comments:		

Sample ID: 03	Start time: 2225	End time: 2425
Sample location: 1st floor – Outside work area	Flow rate (LPM): 10	
Negative air machine exhaust, lecture hall 104	Total time: 120	Total volume: 1200
Work activity: Installing ceiling tiles + pipes	No of fibers: 5	No of fields: 100
	Airborne fiber concentrati	on (fibers/cc): <0.002
Other comments:		

Sample ID: 04	Start time: 0110	End time: 0310
Sample location: 1 <sup>st</sup> floor - Outside work area	Flow rate (LPM): 10	
by Decontamination room, lecture hall 101	Total time: 120	Total volume: 1200
Work activity: Installing ceiling tiles + pipes	No of fibers: 4	No of fields: 100
	Airborne fiber concentration	on (fibers/cc): <0.002
Other comments:		

Sample ID: 05	Start time: 0110	End time: 0310
Sample location: 1 <sup>st</sup> floor - Outside work area	Flow rate (LPM): 10	
Hallway, lecture hall 101	Total time: 120	Total volume: 1200
Work activity: Installing ceiling tiles + pipes	No of fibers: 3	No of fields: 100
	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 06	Start time: 0115	End time: 0315
Sample location: 1 <sup>st</sup> floor - Outside work area	Flow rate (LPM): 10	
Negative air machine exhaust, lecture hall 101	Total time: 120	Total volume: 1200
Work activity: Installing ceiling tiles + pipes	No of fibers: 7.5	No of fields: 100
	Airborne fiber concentrati	on (fibers/cc): 0.003
Other comments:		

Sample name (print)	: Jesse Sanchez	
Signature	: Jesse Sanchez	Page1 of1

11550051154tement 1111 1110mtoling Data (1 Civi)		
Project Number:	2019-3385UCI	
Project Site Address:	Rowland Hall - 1st floor, Rooms 101 & 104	
Sample Date:	6/18 - 6/19/19	
Analysis type:	PCM (NIOSH 7400A)	OM
Analysis by:	Jesse Sanchez	ENVIRO
Date Analyzed:	6/19/19	OW



Sample ID: 01	Start time: 2210	End time: 2410
Sample location: 1st floor – Outside work area	Flow rate (LPM): 10	
Hallway by decontamination room, room104	Total time: 120	Total volume: 1200
Work activity: Cleaning work area	No of fibers: 1.5	No of fields: 100
	Airborne fiber concentration	on (fibers/cc): <0.002
Other comments:		

Sample ID: 02	Start time: 2210	End time: 2410
Sample location: 1 <sup>st</sup> floor - outside work area	Flow rate (LPM): 10	
hallway, room 104	Total time: 120	Total volume: 1200
Work activity: Cleaning work area	No of fibers: 2	No of fields: 100
	Airborne fiber concentration	on (fibers/cc): <0.002
Other comments:	·	

Sample ID: 03	Start time: 2215	End time: 2415
Sample location: 1 <sup>st</sup> floor – outside work area	Flow rate (LPM): 10	
Negative air machine exhaust	Total time: 120	Total volume: 1200
Work activity: Cleaning work area	No of fibers: 7	No of fields: 100
	Airborne fiber concentrati	on (fibers/cc): 0.003
Other comments:		

Sample ID: 04	Start time: 0105	End time: 0305
Sample location: 1 <sup>st</sup> floor - outside work area	Flow rate (LPM): 10	
hallway by decontamination room 101	Total time: 120	Total volume: 1200
Work activity: Cleaning work area	No of fibers: 2	No of fields: 100
	Airborne fiber concentrati	on (fibers/cc): <0.002
Other comments:		

Sample ID: 05	Start time: 0105	End time: 0305
Sample location: 1 <sup>st</sup> floor - outside work area	Flow rate (LPM): 10	
by decontamination room 101	Total time: 120	Total volume: 1200
Work activity: Cleaning work area	No of fibers: 1.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): <0.002	
Other comments:		

Sample ID: 06	Start time: 0110	End time: 0310
Sample location: 1 <sup>st</sup> floor - outside work area	Flow rate (LPM): 10	
Negative air machine exhaust for room 101	Total time: 120	Total volume: 1200
Work activity: Cleaning work area	No of fibers: 4.5	No of fields: 100
	Airborne fiber concentr	ation (fibers/cc): <0.002
Other comments:	·	

Sample name (print)	: Jesse Sanchez	
Signature	: Jesse Sanchez	Page1of1

## **Asbestos Project Air Monitoring Data (PCM)**

Project Number:	2019-3385UCI	
Project Site Address:	Rowland Hall - 1st floor, Rooms 101 & 104	
Sample Date:	6/19/2019	
Analysis type:	PCM (NIOSH 7400A)	OMEGA ENVIRONMENTAL
Analysis by:	Christopher Cañas	ENVIRONMENTAL
Date Analyzed:	6/19/2019	

#### Room 101 PCM Results

Sample ID: 1	Start time: 8:10am	End time: 9:40am
Sample location: Inside work area - NW Corner Flow rate (LPM): 15		
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 10.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.004	
Other comments:		

Sample ID: 2	Start time: 8:10am	End time: 9:40am
Sample location: Inside work area - NE Corner	Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 11	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.004	
Other comments:		

Sample ID: 3	Start time: 8:10am	End time: 9:40am
Sample location: Inside work area - SW Corner	<b>le location</b> : Inside work area - SW Corner Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 8.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.003	
Other comments:		

Sample ID: 4	Start time: 8:10am	End time: 9:40am
Sample location: Inside work area - SE Corner	<b>ample location</b> : Inside work area - SE Corner Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 11	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.004	
Other comments:		

Sample ID: 5	Start time: 8:10am	End time: 9:40am
Sample location: Inside work area - Center Area	Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 9.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.003	
Other comments:		

Sample name (print)	: Christopher Cañas 1
Signature	: Christopher Cañas

## **Asbestos Project Air Monitoring Data (PCM)**

Project Number:	2019-3385UCI	
Project Site Address:	Rowland Hall - 1st floor, Rooms 101 & 104	
Sample Date:	6/19/2019	
Analysis type:	PCM (NIOSH 7400A)	OMEGA ENVIRONMENTAL
Analysis by:	Christopher Cañas	ENVIRONMENTAL
Date Analyzed:	6/19/2019	24441 7340

#### Room 104 PCM Results

Sample ID: 6	Start time: 10:00am	End time: 11:30am
Sample location: Inside work area - NW Corner	Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 13	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.005	
Other comments:		

Sample ID: 7	Start time: 10:00am	End time: 11:30am
Sample location: Inside work area - NE Corner	Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 12.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.005	
Other comments:		

Sample ID: 8	Start time: 10:00am	End time: 11:30am
Sample location: Inside work area - SW Corner	Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 13.5	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.005	
Other comments:		

Sample ID: 9	Start time: 10:00am	End time: 11:30am
Sample location: Inside work area - SE Corner	Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 11	No of fields: 100
	Airborne fiber concentration (fibers/cc): 0.004	
Other comments:		

Sample ID: 10	Start time: 10:00am	End time: 11:30am
Sample location: Inside work area - Center Area	Flow rate (LPM): 15	
	Total time: 90	Total volume: 1,350
Work activity: Air Clearance	No of fibers: 11	No of fields: 100
	Airborne fiber concentration	on (fibers/cc): 0.004
Other comments:		

Sample name (print)	: Christopher Cañas	
Signature	: Christopher Cañas	

### **Asbestos Project Air Monitoring Data (PCM)**

Project Number:	2019-3385UCI	
Project Site Address:	Rowland Hall - 1st floor, Rooms 101 & 104	
Sample Date:	6/19/2019	
Analysis type:	PCM (NIOSH 7400A)	OMEGA ENVIRONMENTAL
Analysis by:	Christopher Cañas	ENVIRONMENTAL
Date Analyzed:	6/19/2019	

Sample ID: 11	Start time: *	End time: *
Sample location: Field blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity:	No of fibers: 0	No of fields: 100
	Airborne fiber concentration	on (fibers/cc): 0
Other comments:		

Sample ID: 12	Start time: *	End time: *
Sample location: Sealed blank	Flow rate (LPM): *	
	Total time: *	Total volume: *
Work activity:	No of fibers: 0	No of fields: 100
	Airborne fiber concentration	on (fibers/cc): 0
Other comments:		

Sample ID:	Start time:	End time:
Sample location:	Flow rate (LPM):	
	Total time:	Total volume:
Work activity:	No of fibers:	No of fields:
	Airborne fiber concentration	on (fibers/cc):
Other comments:		

Sample name (print)	: Christopher Cañas	
Signature	: Christopher Cañas	



4570 Campus Drive, Suite 30 Newport Beach, California 92660

Phone: (949) 252-2145, Fax: (949) 252-2148

Omega Site Representative Signature: Jesse Sanchez

Page # 1 of 1

Date: 06/13/2019

Project Number: 2019-3385UCI	Date: 06/13/2019
Project Name: UCI	Omega Representative: Jesse Sanchez
Project Address: Rowland Hall - 1st floor, rooms 101 & 104	
Client Contact:	
Client Phone #:	

2000	Omega + ECG arrive on-site to start 8 pm shift, Scope of work: ECG will set up a full-containment in lecture hall
	104 for demo ceiling tiles and spot abatement. After containment is set up ECG will request visual inspection from
	Omega to start the work.
2010	At this time ECG begin to mobilize equipment for containment set up.
2100	At this time work continues to move forward, no issues to report.
2200	Omega walks through the containment.
2300	At this time ECG continue to set up containment, no issues to report.
2400	Crew break for lunch.
0100	Crew return from lunch.
0110	ECG continue to set up full-containment in the lecture room 104.
0215	ECG request visual inspection from Omega.
0250	Omega gives the ok to start the work.
0300	Omega demobilize perimeter air samples at this time + ECG enter containment wearing proper PPE + Half-face
	Respirators.
0405	Work continues to move forward, ECG continue to demo ceiling tiles + vacuuming the area and tiles.
0500	Omega demobilize perimeter air samples, Omega will analyze samples using NIOSH 7400 method.
0600	Shift has ended for today, ECG + Omega off-site.



Omega Site Representative Signature: Jesse Sanchez

4570 Campus Drive, Suite 30 Newport Beach, California 92660

Phone: (949) 252-2145, Fax: (949) 252-2148

Page # 1 of 1

Date: 06/14/2019

Project Number: 2019-3385UCI	Date: 06/14/2019
Project Name: UCI	Omega Representative: Jesse Sanchez
Project Address: Rowland Hall - 1st floor	
Client Contact:	
Client Phone #:	

	TIME AND ACTIVITY		
2000	Omega + ECG arrive on-site to start 8 pm shift, Scope of work: ECG will enter containment wearing proper		
	PPE + Half-face respirator to demo ceiling for spot abatement in lecture hall 101.		
2015	At this time ECG begin to mobilize equipment near the work area to begin the work.		
2020	ECG enter containment wearing proper PPE + Half-face respirators.		
2100	At this time work continues to move forward, no issues to report ECG continue to demo ceiling tiles.		
2200	Omega enters containment wearing proper PPE + Full-face respirator to observe the work.		
2300	Omega exits containment, work continues to move forward poly walls have good integrity.		
2400	Crew break for lunch.		
0100	Crew return from lunch + Omega mobilize and set up high flow perimeter air samples.		
0200	No issues to report, ECG continue to work under negative pressure containment.		
0300	At this time Omega begin to demobilize perimeter air samples.		
0400	ECG begin to load out bags of ceiling tiles to be disposed of.		
0500	Omega sends PCM air results to UCI Reps. + Omega Rep. Navid Salari.		
0600	Shift has ended for today ECG + Omega off site.		



4570 Campus Drive, Suite 30 Newport Beach, California 92660

Phone: (949) 252-2145, Fax: (949) 252-2148

Page # 1 of 1

Project Number: 2019-3385UCI	Date: 06/15/2019
Project Name: UCI	Omega Representative: Jesse Sanchez
Project Address: Rowland Hall - 1st floor, Rooms 101 & 104	
Client Contact:	
Client Phone #:	

	TIME AND ACTIVITY
2000	At this time Omega + ECG arrive on-site to start 8 pm shift, Scope of work: ECG will enter containment to work
	On spot abatement. Cosco have laid out designated areas for ECG to spot abatement for pipe installation. Work
	Areas will consist of lecture hall 104 and 101. Omega will be setting up high flow air samples for perimeter air
	Monitoring, crew consist of 1 supervisor + 5 workers.
2020	ECG enter containment wearing proper PPE + Half-face respirators to work on spot abatement.
2050	At this time ECG supervisor inform Omega they will be working on demo ceiling tiles first, Cosco had made lay
	Outs where ceiling tiles need to be removed, ECG will start the work on Lecture hall 104.
2130	No issues to report at this time ECG will soon begin on spot abatement.
2200	Omega mobilize and set up perimeter air samples running at 10 LPM.
2330	No issues to report at this time, work continues to move forward.
2400	Crew break for lunch.
0100	Crew return from lunch.
0110	ECG enter containment (Lecture hall 104) to clean the area of any debris or trash that was made.
0200	At this time ECG enter the other containment (Lecture hall 101) to demo ceiling tiles + work on spot abatement.
0210	Omega mobilize and set up perimeter air samples.
0300	At this time Omega enters containment (Lecture hall 101) to observe the work.
0330	Omega exits containment, work continues to move forward ECG are working on spot abatement of fireproof
	Overspray.
0525	ECG begin to exit the decontamination room.
0600	Shift has ended for today, ECG have completed spot abatement.

Omega Site Representative Signature: Jesse Sanchez	Date: 06/15/2019



4570 Campus Drive, Suite 30 Newport Beach, California 92660

Phone: (949) 252-2145, Fax: (949) 252-2148

Page # 1 of 1

Project Number: 2019-3385UCI	Date: 06/17/2019
Project Name: UCI	Omega Representative: Jesse Sanchez
Project Address: Rowland Hall - 1st floor, Rooms 101 & 104	
Client Contact:	
Client Phone #:	

	TIME AND ACTIVITY		
2200	Omega + ECG and BNB arrive on-site to start 10 pm shift, Scope of work: Cosco will enter containment to		
	Complete installing pipes, BNB will also enter containment to install ceiling tiles, the containment will consist of		
	Lecture hall 101 + 104. ECG will prep the south service floor hallway to demo ceiling tiles to then be demobilized		
	To the dumpster, ECG will clean the ceiling tiles before demobilizing them.		
2215	At this time Cosco + BNB enter containment (104) wearing proper PPE + Half-face respirator.		
2220	Omega mobilize and set up perimeter air samples at lecture hall 104 containment + ECG begin to prep the south		
	Hallway on the service floor.		
2300	At this time work continues to move forward, no issues to report.		
2420	At this time Omega demobilize perimeter air samples from Lecture hall 104, samples have been running at 10		
	LPM.		
0100	At this time BNB enter lecture hall 101 containment to install ceiling tiles.		
0110	Omega mobilize and set up perimeter air samples at the lecture hall containment 101.		
0200	Crew break for lunch.		
0300	Crew return from lunch.		
0310	Omega demobilize perimeter air samples from Lecture hall 101.		
0400	At this time ECG continue to demo ceiling tiles, BNB are nearly done installing ceiling tiles in Lecture hall 101.		
0435	At this time ECG supervisor request visual inspection from Omega environment to tear down the poly floors		
	and walls.		
0438	Omega enter containment wearing proper PPE + Full-face respirator to conduct visual inspection.		
0520	At this time Omega exits containment + informs ECG supervisor they have the ok to tear down the containment.		
0600	Shift has ended for today, ECG have torn down the containment, ECG + Omega are off site		

Omega Site Representative Signature: Jesse Sanchez	Date: 06/17/2019
Omega Site Representative Signature: Jesse Sanchez	Date: 06/1//2019



4570 Campus Drive, Suite 30 Newport Beach, California 92660

Phone: (949) 252-2145, Fax: (949) 252-2148

Page # 1 of 1

Project Number: 2019-3385UCI	Date: 06/18/2019
Project Name: UCI	Omega Representative: Jesse Sanchez
Project Address: Rowland Hall - 1st floor	
Client Contact:	
Client Phone #:	

	TIME AND ACTIVITY		
2200	At this time Omega, ECG + Cosco arrive on-site to start 10 pm shift. Omega Heri Rodriguez briefs Omega Jesse		
	On any activities during his shift, Heri is relieved from site. Scope of work: ECG will enter Lecture hall 101 and		
	104 containment to work on final clean up. BNB will be working on installing ceiling tiles + Cosco will be		
	Installing pipes for new fire system on the 1st floor.		
2210	Omega mobilize and set up perimeter air samples for the lecture hall 104 + ECG enter containment Lecture hall		
	104 wearing proper PPE + Half-face respirators.		
2300	At this time there are no issues to report, ECG continue to work in Lecture hall 104 cleaning the work area.		
2410	Omega demobilize perimeter air samples from Lecture hall 104.		
0100	At this time ECG continue to clean the work area lecture hall 104 + ECG send a crew to enter Lecture hall 101		
	To clean the area.		
0105	At this time Omega mobilize and set up perimeter air samples for Lecture hall 101.		
0200	Crew break for lunch.		
0300	Crew return from lunch.		
0310	At this time Omega demobilize perimeter air samples from Lecture hall 101.		
0400	At this time ECG request visual inspection from Omega in Lecture hall containment 101 and 104.		
0405	Omega enters containment Lecture hall 101 to conduct visual inspection.		
0435	Omega exits containment 101 to enter 104 lecture hall containment.		
0500	At this time Omega exits containment 104, ECG has the ok to encapsulate both lecture hall containments 101 and		
	104.		
0600	At this time shift has ended, ECG have encapsulated the work areas Omega will run clearances during the next		
	Shift.		

Omega Site Representative Signature: Jesse Sanchez	Date: 06/18/2019
--	------------------

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

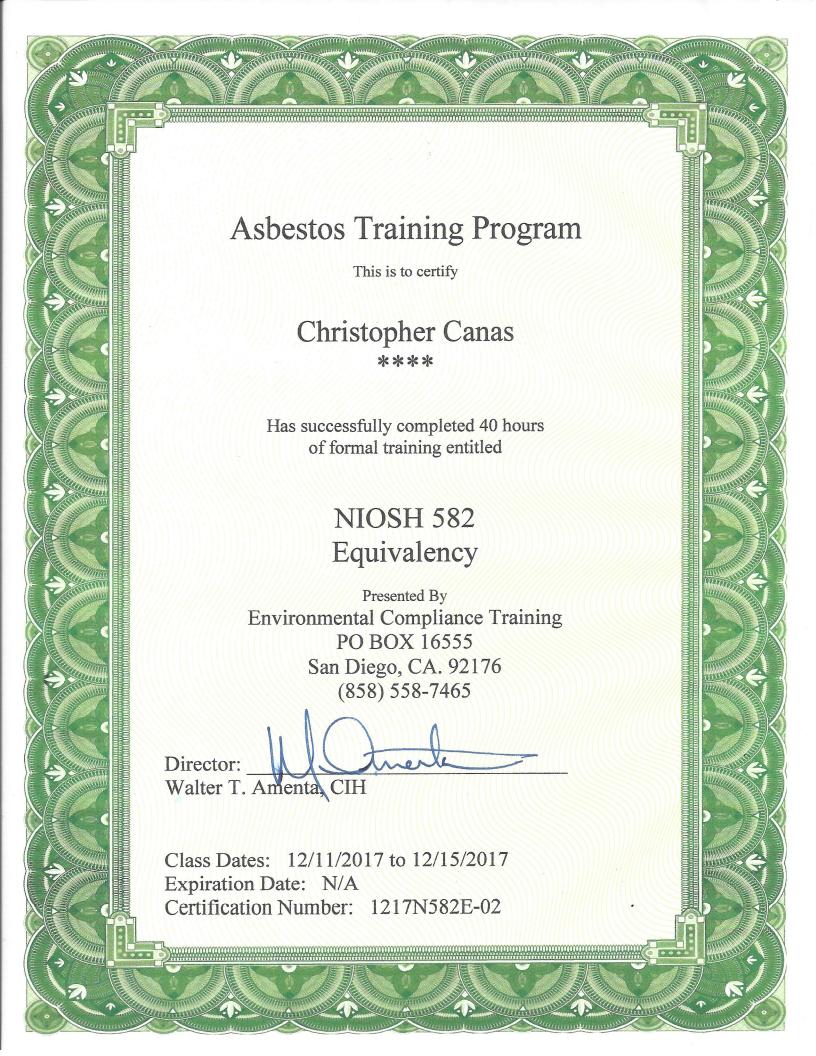
Christopher E Canas

Certification No. 16-5978

Expires on \_\_08/16/19

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.







# Certificate of Attendance

**CERTIFICATE NUMBER** 

89016

This is to Certify that

## JESSE SANCHEZ

Has Completed the Course of

### AHERA ASBESTOS ABATEMENT CONTRACTOR/SUPERVISOR 8 HR. REFRESHER COURSE CA-014-04

UNDER TSCA 206, FOR PURPOSES OF COMPLIANCE WITH 29 CFR 1926.1101 AND

TITLE 8 CCR 1529 AND TITLE 8 CCR 5208

ARMANDO DUCOING

DIRECTOR

August 31, 2018

COMPLETION DATE

E083118CSR

083118

CLASS NUMBER / STARTING DATE

August 31, 2019 Certificate Expires

Ecologics Training Institute



# Certificate of Attendance

**CERTIFICATE NUMBER** 79041

This is to Certify that

## **JESSE SANCHEZ**

Has Completed the Course of

## AHERA ASBESTOS ABATEMENT BUILDING INSPECTOR 4 HR. REFRESHER COURSE CA-014-06

UNDER TSCA 206, FOR PURPOSES OF COMPLIANCE WITH 29 CFR 1926.1101 AND

TITLE 8 CCR 1529 AND TITLE 8 CCR 5208

ARMANDO DUCOING DIRECTOR

August 17, 2018

E081718BIR

081718

August 17, 2019

COMPLETION DATE

CLASS NUMBER / STARTING DATE

CERTIFICATE EXPIRES

Ecologics Training Institute



# Certificate of Attendance

CERTIFICATE NUMBER
32297

This is to Certify that

## JESSE SANCHEZ

Has Completed the Course of

#### AIR SAMPLING & ANALYSIS OF AIRBORNE ASBESTOS (NIOSH-582 EQUIVALENT)

UNDER TSCA 206, FOR PURPOSES OF COMPLIANCE WITH 29 CFR 1926.1101 AND

TITLE 8 CCR 1529 AND TITLE 8 CCR 5208.

ARMANDO DUCOING

DIRECTOR

September 21, 2018

E091718NIOSH

091718

COMPLETION DATE

CLASS NUMBER / STARTING DATE

CERTIFICATE EXPIRES

Ecologics Training Institute

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

Navid Salari LOF TA

Certification No. 194-1557

Expires on 03/10/20"

This certification was issued by the Division of Occupational Sefety and Health as authorized by Sections 7180 at sed of the Business and Professions Code.