

## MONITORING AND CONTRACTOR OBSERVATION DURING ASBESTOS RELATED WORK

Lincoln Child Development Center

April 14, 2022

Prepared For:

**Santa Monica-Malibu Unified School District**

2828 West 4<sup>th</sup> Street  
Santa Monica, CA 90405



SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

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## Acronyms

ACM	Asbestos-Containing Material
ACCM	Asbestos-Containing Construction Material
LBP	Lead-Based Paint
LCP	Lead-Containing Paint
PCB	Polychlorinated Biphenyl
PLM	Phase Light Microscopy
XRF	X-ray Fluorescence
HVAC	Heating, Air Conditioning, and Ventilation
CAC	Certified Asbestos Consultant
Cal/OSHA	California Occupational Safety and Health
CDPH	California Department of Public Health
AHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos School Hazard Abatement Reauthorization Act
USEPA	United States Environmental Protection Agency
NVLAP	National Voluntary Laboratory Accreditation Program
HUD	Housing and Urban Development
CFR	Code of Federal Regulations
CCR	California Code of Regulations
SCAQMD	South Coast Air Quality Management District
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limits Concentration
TCLP	Toxicity Characteristic Leaching Procedure

## Definitions

**Accessible** when referring to ACM means that the material is subject to disturbance by school building occupants or custodial or maintenance personnel in the course of their normal activities.

**Accredited or accreditation** when referring to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Toxic Substances Control Act.

**Air erosion** means the passage of air over friable ACBM which may result in the release of asbestos fibers.

**Asbestos** means the asbestiform varieties of: Chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite/grunerite); anthophyllite; tremolite; and actinolite.

**Asbestos-containing material (ACM)** when referring to school buildings means any material or product which contains more than 1 percent asbestos.

**Asbestos-containing construction material (ACM)** when referring to school buildings means any material or product which contains more than one-tenth of 1 percent asbestos.

**Asbestos-containing building material (ACBM)** means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

**Asbestos debris** means pieces of ACBM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.

**Damaged friable miscellaneous ACM** means friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

**Damaged friable surfacing ACM** means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

**Damaged or significantly damaged thermal system insulation ACM** means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, is crushed, water stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

**Encapsulation** means the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

**Enclosure** means an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.

**Fiber release episode** means any uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

**Friable** when referring to material in a school building means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such previously non-friable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

**Functional space** means a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

**High-efficiency particulate air (HEPA)** refers to a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3  $\mu$ m in diameter or larger.

**Homogeneous area** means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

**Local education agency means (LEA):** (1) Any local educational agency as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 3381). (2) The owner of any non-public, non-profit elementary, or secondary school building. (3) The governing authority of any school operated under the defense dependent's education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921, et seq.).

**Miscellaneous ACM** means miscellaneous material that is ACM in a school building.

**Miscellaneous material** means interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.

**Non-friable** means material in a school building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

**Operations and maintenance (O & M) program** means a program of work practices to maintain friable ACBM in good condition, ensure clean-up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACBM disturbance or damage.

**Potential damage** means circumstances in which: (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

**Potential significant damage** means circumstances in which: (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage. (3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

**Preventive measures** means actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.

**Removal** means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.

**Repair** means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

**Response action** means a method, including removal, encapsulation, enclosure, repair, operations and maintenance that protects human health and the environment from friable ACBM.

**Routine maintenance area** means an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

**School** means any elementary or secondary school as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2854).

**School building** means: (1) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food. (2) Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education. (3) Any other facility used for the instruction or housing of students or for the administration of educational or research programs. (4) Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in this definition of "school building" under paragraphs (1), (2), or (3). (5) Any portico or covered exterior hallway or walkway. (6) Any exterior portion of a mechanical system used to condition interior space.

**Significantly damaged friable miscellaneous ACM** means damaged friable miscellaneous ACM where the damage is extensive and severe.

**Significantly damaged friable surfacing ACM** means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

**State** means a State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Northern Marianas, the Trust Territory of the Pacific Islands, and the Virgin Islands.

**Surfacing ACM** means surfacing material that is ACM.

**Surfacing material** means material in a school building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

**Thermal system insulation** means material in a school building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

**Thermal system insulation ACM** means thermal system insulation that is ACM.

**Vibration** means the periodic motion of friable ACBM which may result in the release of asbestos fibers

## 1.0 INTRODUCTION

From April 4 to 6, 2022, Alta Environmental, LP, an NV5 company (Alta/NV5) conducted air monitoring and contractor observation during asbestos abatement activities at Lincoln Child Development Center in Santa Monica, CA. The site is located at 1532 California Avenue, Santa Monica, CA 90403.

## 2.0 SCOPE OF SERVICES

### 2.1 ALTA MONITORING AND SAMPLING

Alta/NV5's monitoring was performed by a California Certified Site Surveillance Technicians. Alta/NV5 completed the following activities during the project:

- Monitoring services during all asbestos related work
- Air sampling during the asbestos related work
- Final visual inspection and clearance testing at the completion of the asbestos related work, as needed

### 2.2 ASBESTOS RELATED WORK

Resource Environmental, Inc., located in Cerritos, California conducted the asbestos related work.

Asbestos-related work activities included the partial removal of the following asbestos-containing materials in areas affected by the project scope of work:

#### Lincoln Child Development Center

- Gray sheet flooring with brown floor tile and mastic – Room 1, Room 2 storage, reception, Room 1 cot storage
- Carpet adhesive and brown floor tile with mastic – Room 1, Room 2, Office

The contractor monitoring was performed by Kevin Reed, Fred Shirley and Tyler Fetty, all California DOSH Certified Site Surveillance Technicians, employed by Alta/NV5.

## 3.0 FIELD AND ANALYTICAL METHODOLOGY

### 3.1 ASBESTOS FIBER CONCENTRATIONS

Asbestos air samples were collected using high volume air sampling pumps. The pump's flow rate was checked before and after each use with a calibrated precision rotometer. Air samples collected during asbestos abatement activities was analyzed in accordance with National Institute of Occupational Safety and Health (NIOSH) Method 7400 (PCM), which specifies the equipment and procedures for mounting, measuring, and counting fibers to determine airborne fiber concentrations. Air samples were analyzed on site by Alta.

## 4.0 MONITORING AND RESULTS

### 4.1 MONITORING

Alta representatives were on site during the removal work to document the work completed by the contractor.

Alta documented that the removal of specified asbestos-containing materials was completed using an appropriate containment which included critical barriers, temporary negative pressure differential and a worker decontamination facility. Asbestos containing materials removal was completed using approved procedures. Worker protection included disposable clothing and ½ face air purifying respirators equipped with HEPA P100 filters.

Alta documented that the asbestos related work was completed using approved work procedures such as critical barriers, appropriate containments, signs, and a worker decontamination facility. Worker protection included disposable clothing and ½ face air purifying respirators equipped with HEPA P100 filters

Asbestos waste generated during this project was disposed of properly at an approved waste disposal facility.

## 5.0 RESULTS

### 5.1 ABATEMENT MONITORING AIR SAMPLE RESULTS

#### 5.1.1 Asbestos Fiber Concentrations

Asbestos perimeter air sampling was conducted by a State Certified Site Surveillance Technician. The results of the air samples collected during abatement work were reported well below 0.01 f/cc, the recommended level by the EPA for area re-occupancy following an asbestos response action.

### 5.2 FINAL VISUAL INSPECTION RESULTS

Before work areas were released, they were inspected by the Contractor's supervisor and Alta representatives for evidence of residual dust and debris. The work areas were found to be acceptable. No dust or debris was observed.

#### 5.2.1 Asbestos Clearance Sampling

Asbestos clearance sampling was conducted by a State Certified Asbestos Consultant or a Site Surveillance Technician under the direction of a Certified Asbestos Consultant.

A minimum of five samples from inside the work area were collected. The samples were analyzed using Transmission Electron Microscopy (TEM). The laboratory results were reported as "No Structures Detected". These results are below the arithmetic mean of asbestos structure concentrations per square millimeter of less than or equal to 70 structures per square millimeter, the established clearance criteria for this project. The area was deemed to be safe to occupy by non-protected personnel and the containment was removed.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

All asbestos-containing materials that were impacted by the project scope of work were successfully removed from the areas referenced in section 2.2 in this closeout report. Refer to the asbestos and lead survey records prepared for this site for materials and locations.

Please note that asbestos-containing materials (ACM) remain on the property. Please reference asbestos and lead survey records prepared for this site regarding asbestos and/or lead containing materials prior to disturbing any building materials at the site.

## 7.0 ASSUMPTIONS AND LIMITATIONS

This report was prepared exclusively for use by the Santa Monica Malibu Unified School District and may not be relied upon by any other person or entity without Alta/NV5's express written permission. The information, conclusions and recommendations described in this report apply to conditions existing at certain locations when services were performed and are intended only for the specific purposes, locations, time frames and project parameters indicated. Alta/NV5 cannot be responsible for the impact of any changes in environmental standards, practices or regulations after performance of services.

In performing our professional services, we have applied present engineering and scientific judgment and used a level of effort consistent with the current standard of practice for similar types of studies.

As applicable, Alta/NV5 has relied in good faith upon representations and information furnished by individuals with respect to operations and existing property conditions, to the extent that they have not been contradicted by data obtained from other sources. Accordingly, Alta/NV5 accepts no responsibility for any deficiencies, omissions, misrepresentations, or fraudulent acts of persons interviewed.

Alta/NV5 will not accept any liability for loss, injury claim, or damage arising directly or indirectly from any use or reliance on this report. Alta/NV5 makes no warranty, expressed or implied

This report is issued with the understanding that the client, the property owner, or its representative is responsible for ensuring that the information, conclusions, and recommendations contained herein are brought to the attention of the appropriate regulatory agencies, as required.

If you have any questions, please do not hesitate to contact the undersigned at (562) 477-0935. We appreciate the opportunity to be of service to the Santa Monica Malibu Unified School District

## 8.0 SIGNATORY

Respectfully submitted by:

**Alta Environmental LP, an NV5 company**



James C. Byers  
Senior Consultant/Project Manager  
Certified Asbestos Consultant  
Cal/OSHA Cert. #06-4122  
CDPH I/A #LRC-00001746

## Appendix A

Daily Field Reports



ALTA  
ENVIRONMENTAL

Log Sheet

Project Name: Lincoln Child Development Date: 04/04/2022  
Project Location: 1538 California Ave. Job No.: 0458-21-10662  
Santha Monica, CA. 90403  
Project/Area Description: ACM Mastic Removal, Entire Floor  
at ground level: 1 Story Building

Scope of Work: 3 Stage Decor with Manometer, Remove  
VFT & VSF, Remove associated ACM mastic using Bead  
Blaster

Type of Containment: 3 stage Decor

Respiratory Protection: Half Face

Abatement Contractor: Resource Environmental, Inc.

Contractor Supervisor: Sigfredo Lupian

Alta Rep. On-Site: K. Reed

Project Manager: Mario Medina

Time Arrived (Military): 0700 Shift Start Time: 0700

Time Left (Military): 1530 Shift End Time: 1530

Type of Sample	Number of Samples Taken	Highest (f/cc)	Lowest (f/cc)
Inside Work Area			
Outside Work Area			
Personal			
Clearance			
Background			
Manometer Reading (Time reading was taken/Actual Reading)			
/	/	/	/
Other Contractors On-Site		Contractor Activities	

# N|V|5

ALTA  
ENVIRONMENTAL

Client: Santa Monica-Halibut USD

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Project Name: Lincoln Child Development Center Alta Job No.: SM5D-21-10662

TIME OF OBSERVATION	COMMENTS
0430	K. Reed Tech leaves office for job site.
0700	K. Reed Tech, NV5 Rep arrives onsite. Resource arrives onsite. NV5 Rep. walks job site with Resource project manager.
0800	Resource Crew begins prep of Class 1 Containment. NV5 Rep. requests worker submittals along with Notifications required to Conduct ACM related work. Work to be Conducted is as follows: VET & VSE and associated ACM mastics to be removed.
0900	Resource Continues Containment prep.
1000	NV5 Rep. walks job site observing progress of Containment prep.
1100	Resource Crew Continues Containment prep.
1200	Break
1300	Return from Break Resource Crew resumes Containment prep. NV5 second shift Rep. arrives onsite. NV5 Rep. gives update to second NV5 Rep.
1400	Resource Crew Continues Containment prep.
1530	End of shift.

For Bag-Out Shift Only

# of Bags	Manifest #

Alta Rep. Signature

Cert. Number: 1A-6733

Date: 04/04/2022

## NV5 LOG SHEET

Project Name: Lincoln Child Development Center Date: Apr 04, 2022

Project Location: Santa Monica, CA Job No.: SM5D-21-10662

Project/Area Description: Rm 1, Rm 2, Kitchen, Pantry, Teacher Workroom, Corridors, Office, Reception, R.R.s, & Storage closets

Scope of Work: Removal of Brown Floor Tile w/Mastic

Type of Containment: Full Containment, 3 Stage Decon w/shower, Neg Air w/Manometer

Respiratory Protection: Half-Face Respirators

Abatement Contractor: Resource Environmental

Contractor Supervisor: Sigi Hernandez / Oscar Plata

NV5 Rep. On-Site: Tyler Fetty

Project Manager: Jim Byers

Time Arrived (Military): 1300 Shift Start Time: 1300

Time Left (Military): 2200 Shift End Time: 2200

Type of Sample	Number of Samples Taken	Highest (f/cc)	Lowest (f/cc)
Inside Work Area			
Outside Work Area	2	0.006	0.004
Personal			
Clearance			
Background			
Manometer Reading (Time reading was taken/Actual Reading)			
1600 / -0.22	1700 / -0.30	1800 / -0.21	2000 / -0.23
Other Contractors On-Site		Contractor Activities	
N/A		N/A	

TIME OF OBSERVATION	COMMENTS
1300	NV5 representative Tyler Fetty arrives at site and meets with Resource Env. 1st shift supervisor Sigi Hernandez and Swing Shift supervisor Oscar Plata to discuss objectives for the day. Plans include to complete set up of containment, and to begin removal of ~2,350 <sup>2</sup> ft of Floor Tile w/Mastic throughout Bldg.
1330	Set up 2 PCM air monitoring samples at West Side Neg Air Exhaust and South Decon Area. Samples calibrated at 3.0 lpm using a rotameter. Samples on-line.
1400	Crew setting up containment inside Bldg. Containment will consist of 2 layers of 6 mil poly sheeting on walls and surfaces including a "pony wall" ceiling, a 3 stage decontamination chamber with bag-out area and shower, and H.E.P.A. filtered negative air machine providing negative pressure inside containment monitored by a manometer.
1500	Crew completes set up of containment. Area is inspected and passes pre-abatement visual. Resource Env. crew don their P.P.E. (Tyvek Body Suits, Half-Face Respirators, Boots, Gloves), enters containment, and work begins with removal of carpet on top of floor tiles.
1630	1st Shift crew doffs their P.P.E., exits containment, and leaves site for the day.
1730	Crew doffs their P.P.E., exits containment, and breaks for lunch. PCM monitoring samples continue to run.
1830	Crew returns from lunch. Resource crew don their P.P.E., enter containment, and work resumes.
1930	Crew using floor buffer to remove any mastic on top of floor tile. Crew also using hand tools such as hammers, scrapers, and shovels to remove floor tile and mastic. Wet methods observed being used.

## For Bag-Out Shift Only

# of Bags	Manifest #
300	N/A

NV5 Rep. Signature: Tyler Fetty  
 Cert. Number: CSST-17-5855  
 Date: Apr 04, 2022

Project Name: Lincoln Child Development Center

NV5 Job No.: SM5D-21-10662

[illegible]

### For Bag-Out Shift Only

# of Bags	Manifest #
300	1

NV5 Rep. Signature: Tyler Fetting  
 Cert. Number: CSST-17-5855  
 Date: Apr 04, 2022



ALTA  
ENVIRONMENTAL

## Log Sheet

Project Name: LINCOLN CHILD DEV. CENTER Date: 4/5/22  
Project Location: LINCOLN CHILD DEV. CENTER Job No.: SMST-21-10662  
Project/Area Description: FLOORING OF THE CHILDHOOD DEVELOPMENT CENTER EXCLUDING N/E OFFICE.  
Scope of Work: REMOVAL OF GRAY SHEET FLOORING W/ MASTIC & REMOVAL OF CARPET ADHESIVE AND BROWN FLOR TILE W/ MASTIC  
Type of Containment: FULL CONTAINMENT, 3-STAGE, NEG AIRS  
Respiratory Protection: HALF-FACED  
Abatement Contractor: RESOURCE  
Contractor Supervisor: SIGI  
Alta Rep. On-Site: FRED SHIRLEY  
Project Manager: JIM BYERS  
Time Arrived (Military): 06:30 Shift Start Time: 05:30  
Time Left (Military): 13:30 Shift End Time: 13:30

Type of Sample	Number of Samples Taken	Highest (f/cc)	Lowest (f/cc)
Inside Work Area			
Outside Work Area	2		
Personal			
Clearance			
Background			
Manometer Reading (Time reading was taken/Actual Reading)			
1	1	1	1
Other Contractors On-Site		Contractor Activities	



ALTA  
ENVIRONMENTAL

Client: SMUSD

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Project Name: LINCOLN CHILD DEVELOPMENT CENTER Alta Job No.: SMSP-21-10682

TIME OF OBSERVATION	COMMENTS
0530	F. SHIRLEY/ LEAVES OFFICE TO GET TO SANTA MONICA SITE.
0645	F. SHIRLEY ARRIVES AT LINCOLN CHILD DEVELOPMENT CENTER
0710	ONE ABATEMENT CONTRACTOR PERSONNEL ARRIVES WITH BEAD BLASTED AND NOTIFIES RESOURCE WONT BE STARTING UNTIL 0800 BECAUSE OF CITY NOISE ORDINANCE.
0800	THE REST OF RESOURCE ABATEMENT CREW ARRIVES.
0830	RESOURCE SUITS UP AND LOADS EQUIPMENT INTO CONTAINERS F. SHIRLEY SETS UP AIR PUMPS AT DRUM & WITH AIR EXHAUST
0930	RESOURCE CONTINUE REMOVAL OF FLOOR MASTIC
1030	RESOURCE CONTINUE REMOVAL OF FLOOR MASTIC
1200	HALF OF RESOURCE CREW TAKE LUNCH.
1300	TYLER FROM NLS ARRIVES ON-SITE.
1315	F. SHIRLEY & TYLER SWITCH OUT AIR PUMPS & TYLER TAKES OVER MONITORING. TYLER HALF OF RESOURCE CREW TAKE LUNCH.
1330	WITH TYLER IN POSSESSION OF ALL CASSETTES & DATA F. SHIRLEY LEAVES SITE. END OF SHIFT.

For Bag-Out Shift Only

# of Bags	Manifest #

Alta Rep. Signature: AKL

Cert. Number:  

Date: 6/15/22

## NV5 LOG SHEET

Project Name: Lincoln Child Development Center Date: Apr 05, 2022

Project Location: Santa Monica, CA Job No.: SMSP-21-10662

Project/Area Description: Rm 1, Rm 2, Kitchen, Pantry, Teacher Workroom, Corridor, Office, Reception, R.R.'s, & Storage/Closets.

Scope of Work: Removal of Brown Floor Tile w/Mastic

Type of Containment: Full Containment, 3 Stage Decontamination w/shower, Neg Air

Respiratory Protection: Half-Face Respirators

Abatement Contractor: Resource Environmental

Contractor Supervisor: Sigi Hernandez

NV5 Rep. On-Site: Tyler Fetty

Project Manager: Jim Byers

Time Arrived (Military): 1300 Shift Start Time: 1300

Time Left (Military): 1900 Shift End Time: 1900

Type of Sample	Number of Samples Taken	Highest (f/cc)	Lowest (f/cc)
Inside Work Area			
Outside Work Area	02	0.005	0.003
Personal			
Clearance			
Background			
Manometer Reading (Time reading was taken/Actual Reading)			
1300	1-0.25	1400	1-0.23
1600	1-0.21	1700	1-0.23
Other Contractors On-Site		Contractor Activities	
N/A		N/A	

TIME OF OBSERVATION	COMMENTS
1300	NV5 representative Tyler Fetty arrives at site and meets with Resource supervisor Sigi Hernandez with work in progress. Plans include final removal of floor tile w/Mastic, to conduct visual clearance, and to encapsulate area once finished. PCM air monitoring samples were set up at 0900 calibrated at 2.0 lpm using a rotameter located at Decon Area and Neg Air Exhaust. Crew conducting final detail removal.
1330	Several crew doff their P.P.E., exit containment, and breaks for lunch. Other crew members who had took lunch earlier remain inside and containment to continue working, using hand buffers to conduct final detail.
1430	Remaining crew return from lunch. Resource crew don their P.P.E., enter containment, and work resumes.
1530	All waste is double bagged in 6 mil poly bags, wetted, properly labeled, sealed using the goose neck tie, and moved to an asbestos labeled storage containment.
1630	Area is being cleaned. Crew H.E.P.A. vacuuming and wet wiping all surfaces in containment. Wet methods observed being used.
1730	Crew completes removal of floor tile and mastic from Lincoln child development center. Area is visually inspected and passes visual clearance. Crew begins encapsulation of area. Collected all PCM samples and equipment. Samples off-line.
1800	Crew completes work. Resource crew doffs their P.P.E., exits containment, and leaves site for the day. Left site for office.
1830	Arrived at office and began to analyze all samples using the NIOSH 7400 method.
1900	All samples under regulation standards. Completed work for the day.

## For Bag-Out Shift Only

# of Bags	Manifest #
60	N/A

NV5 Rep. Signature: Tyler Fetty  
 Cert. Number: CSST: 17-5855  
 Date: Apr 05, 2022

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NV5 Job No.: SM5D-21-10662

For Bag-Out Shift Only	
# of Bags	Manifest #

NV5 Rep. Signature: Tyler Feltz  
 Cert. Number: CSST:17-5855  
 Date: Apr 06, 2022

## Appendix B

Perimeter and Clearance Air Sampling Data Sheets and Results

**NV5**  
**Air Sampling Form**

Client: Santa Monica School District  
Project No. SMSD-21-10662  
Project Location Santa Monica, CA

Date Apr 04, 2022  
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Sample #	Pump #	Sample Location	Type	Activity in Progress	Start Time	Stop Time	LPM Start	LPM Stop	Volume	Fibers/Fields	F/CC*
01	01	Decon Area	OWA	Floor Removal	1330	2030	3.0	3.0	1,260	0/100	0.004
02	02	North Side Neg Air Exhaust	OWA	Floor Removal	1332	2032	3.0	3.0	1,260	17/100	0.006
03	'	Field Blank	'	'	'	'	'	'	'	00/100	'
04	'	Lab Blank	'	'	'	'	'	'	'	00/100	'

Type: OWA = Outside Work Area; IWA = Inside Work Area; B = Background; P = Personal; C = Clearance

\* Detection limit is 5.5 f/cc

**Analytical Method:**

PCM-Niosh 7400	✓
TEM-AHERA	
TEM-EPA Yamate	
NIOSH-7082/Pb	

**Sample Media:**

25 mm MCE 0.8 µg	✓
25 mm MCE 0.45 µg	
37 mm MCE	

**Sample Analysis:**

CTL/On Site	✓
Outside Lab	

**Field Blank**

Sample # 03  
Fiber/Fields 00/100

**Lab Blank**

Sample # 04  
Fiber/Fields 00/100

**Microscopist:**

Microscope #:  
Graticle field area (mm<sup>2</sup>):  
Filter area (mm<sup>2</sup>):  
Q.C. slide readable:  
Rotometer #:

**Comments:**

On-Site Technician: Tyler Fetty

Signature: Tyler Fetty

Cert Number: CSST-17-5855

# NV5 Air Sampling Form

Client: Santa Monica School District  
 Project No. SMSP-21-10662  
 Project Location Santa Monica, CA

Date Apr 05, 2022  
 Page 1 of 1

Sample #	Pump #	Sample Location	Type	Activity in Progress	Start Time	Stop Time	LPM Start	LPM Stop	Volume	Fibers/Fields	F/CC*
405-1	01	Decon Area	OWA	Floor Removal	0930	1730	2.0	2.0	960	0%/100	0.003
405-2	02	North Side Neg Air Exhaust	OWA	Floor Removal	0931	1731	2.0	2.0	960	10%/100	0.005
405-3	'	Field Blank	'	'	'	'	'	'	'	0%/100	'
405-4	'	Lab Blank	'	'	'	'	'	'	'	0%/100	'

Type: OWA = Outside Work Area; IWA = Inside Work Area; B = Background; P = Personal; C = Clearance

\* Detection limit is 5.5 f/cc

## Analytical Method:

PCM-Niosh 7400	<input checked="" type="checkbox"/>
TEM-AHERA	<input type="checkbox"/>
TEM-EPA Yamate	<input type="checkbox"/>
NIOSH-7082/Pb	<input type="checkbox"/>

## Sample Media:

25 mm MCE 0.8 µg	<input checked="" type="checkbox"/>
25 mm MCE 0.45 µg	<input type="checkbox"/>
37 mm MCE	<input type="checkbox"/>

## Sample Analysis:

CTL/On Site	<input checked="" type="checkbox"/>
Outside Lab	<input type="checkbox"/>

## Field Blank

Sample # 405-03  
 Fiber/Fields 0%/100

## Lab Blank

Sample # 405-04  
 Fiber/Fields 0%/100

## Microscopist:

Microscope #:

Graticle field area (mm<sup>2</sup>):

Filter area (mm<sup>2</sup>):

Q.C. slide readable:

Rotometer #:

## Comments:

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On-Site Technician: Tyler Fatty

Signature: Tyler Fatty

Cert Number: CSST:17-5855



# LA Testing

5431 Industrial Drive Huntington Beach, CA 92649

Tel/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com> / [gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 332208126

Customer ID: AIRQ22

Customer PO:

Project ID:

**Attention:** Jim Byers  
NV5  
12467 Telecom Drive  
Temple Terrace, FL 33637

**Phone:** (813) 571-9788

**Fax:** (813) 571-9374

**Received Date:** 04/06/2022 12:20 PM

**Analysis Date:** 04/07/2022

**Collected Date:** 04/06/2022

**Project:** Santa Monica School District / SMSD-21-10662 / Santa Monica, CA

## Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm <sup>2</sup> )	Non Asb	Asbestos Type(s)	#Structures ≥0.5μ < 5μ	≥5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm <sup>2</sup> )	(S/cc)
406-01 332208126-0001	Rm 2 N.W.	1300.00	0.0610	0	None Detected	0	0	0.0049	<16.00	<0.0049
406-02 332208126-0002	Kitchen center	1300.00	0.0610	0	None Detected	0	0	0.0049	<16.00	<0.0049
406-03 332208126-0003	Corridor center	1300.00	0.0610	0	None Detected	0	0	0.0049	<16.00	<0.0049
406-04 332208126-0004	Corridor East	1300.00	0.0610	0	None Detected	0	0	0.0049	<16.00	<0.0049
406-05 332208126-0005	Rm 1 center	1300.00	0.0610	0	None Detected	0	0	0.0049	<16.00	<0.0049
406-06 332208126-0006	Field blank	0.00	0.1220	0	None Detected	0	0	N/A	<8.20	N/A
406-07 332208126-0007	Lab blank	0.00	0.1220	0	None Detected	0	0	N/A	<8.20	N/A

Analyst(s)

Mindy Le (7)

Michael Chapman, Laboratory Manager  
or other approved signatory

LA Testing maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by LA Testing. LA Testing bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in structures/cm3 are not covered by the laboratory's NVLAP accreditation. Measurement of uncertainty available upon request.

Samples analyzed by LA Testing Huntington Beach, CA NVLAP Lab Code 101384-0

Initial report from: 04/07/2022 09:37 AM

# NV5 Air Sampling Form

Client: Santa Monica School District  
Project No. SMSD-21-10662  
Project Location Santa Monica, CA

#332208126

Date Apr 06, 2022  
Page 1 of 1

Sample #	Pump #	Sample Location	Type	Activity in Progress	Start Time	Stop Time	LPM Start	LPM Stop	Volume	Fibers/Fields	F/CC*
406-01	01	Rm 2 N.W.	C	Floor Removal	0845	1055	10.0	10.0	1,300		
406-02	02	Kitchen Center	C	↓	0846	1056	10.0	10.0	1,300		
406-03	03	Corridor Center	C		0847	1057	10.0	10.0	1,300		
406-04	04	Corridor East	C		0848	1058	10.0	10.0	1,300		
406-05	05	Rm 1 Center	C		0849	1059	10.0	10.0	1,300		
406-06	Ø	Field Blank	'	'	'	'	'	'	'		
406-07	Ø	Lab Blank	'	'	'	'	'	'	'		

Type: OWA = Outside Work Area; IWA = Inside Work Area; B = Background; P = Personal; C = Clearance

\* Detection limit is 5.5 f/cc

## Analytical Method:

PCM-Niosh 7400	
TEM-AHERA	✓
TEM-EPA Yamate	
NIOSH-7082/Pb	

## Sample Media:

25 mm MCE 0.8 µg	
25 mm MCE 0.45 µg	✓
37 mm MCE	

## Sample Analysis:

CTL/On Site	
Outside Lab	✓

## Field Blank

Sample #	
Fiber/Fields	

## Lab Blank

Sample #	
Fiber/Fields	

## Microscopist:

Microscope #:	
Graticle field area (mm²):	
Filter area (mm²):	
Q.C. slide readable:	
Rotometer #:	

## Comments:

24 hr TAT
Report send to Jim.Byers@nv5.com

On-Site Technician: Tyler Fetty

Signature: Tyler Fetty

Cert Number: TF Es CSST:17-5855

JS(WI) 4/6/22 12:20pm

## Appendix C

Major Abatement Record

## MAJOR ABATEMENT RECORD

1. Location of abatement activity:

SITE NAME: Lincoln Child Development Center

ADDRESS: 1532 California Avenue, Santa Monica, CA 90403

BUILDING NAME: CDC building

ROOM OR SPACE: All exterior walls

2. Reason for abatement: Flooring replacement project

3. Detailed description of work: Removal of Gray sheet flooring with brown floor tile and mastic – room 1, room 2 storage, reception, Room 1 cot storage; Carpet adhesive and brown floor tile with mastic – room 1, room 2, office

4. Abatement method used: ☒ Wet Methods ☒ H.E.P.A. Vacuum  
☒ Negative Air ☒ Isolation ☒ 3-Stage Decontamination  
☐ Mini-Enclosure ☐ Glove Bag ☐ Other: \_\_\_\_\_

5. Start Date: April 4, 2022 Completion Date: April 6, 2022

6. Approximate quantity of material abated: 2,350 square feet

7. Type of asbestos-containing material abated: Flooring

8. Name (s) of personnel involved in the abatement: Resource Environmental, Inc.

And, if work is performed by contractor, complete item 8a below.

8a Name of Contractor: Resource Environmental, Inc.

Address: 13100 Alondra Boulevard, Cerritos, CA 90703

D.O.S.H. Registration Number: 910

9. Disposal Location:

Name: Azusa Land Reclamation

Address: 1211 West Gladstone, Azusa, California 91702

10. Clearance Air Monitoring: TEM

Sample Numbers

406-01	406-02	406-03
406-04	406-05	406-06
406-07		

For each of the samples above, attaché a copy of the Chain of Custody which contains the name and signature of the sample, location of samples, and date of collection. Also, attach a copy of the Analysis Report which contains the name and address of the laboratory, date of analysis, results, method of analysis, name and signature of analyst, and a statement that the laboratory meets the requirements of 763.90 (l)(2)(ii).

## Appendix D

Employee Certifications

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

**Kevin C. Reed**

Name

Certification No. **19-6733**

Expires on **10/13/22**

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  
Division of Occupational Safety and Health  
**Certified Site Surveillance Technician**

**Tyler J Fetty**



Name

Certification No. **17-5855**

Expires on **02/15/23**

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  
Division of Occupational Safety and Health  
**Certified Site Surveillance Technician**

**Fred D Shirley**



Name

Certification No. 10-6901

Expires on 11/19/22

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  
Division of Occupational Safety and Health  
**Certified Asbestos Consultant**

**James Charles Byers, Jr.**



Certification No. **06-4122**

Expires on **01/18/23**

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

