ENTEK
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HAZARDOUS MATERIALS SURVEY
FINAL REPORT

OWNER/CLIENT

Sacramento City Unified School District
5735 47th Avenue
Sacramento, CA 95824

CONTACT

Mr. Chris Ralston, Director III
Facilities Management, Maintenance & Operations, and Resource Management

SURVEY ADDRESS

Albert Einstein Middle School
9325 Mirandy Drive
Sacramento, CA 95826

BUILDING(S) SURVEYED

Roofing (Excluding Gym Building), Exterior Windows & Paints
Re-Roof & Beautification Project

PREPARED BY

Blake Howes
CAC #13-5015 & CDPH #I/A 3315
Entek Consulting Group, Inc.
4200 Rocklin Road, Suite 7
Rocklin, CA 95677

Entek Project #23-6539

February 14, 2023

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TABLE OF CONTENTS

Executive Summary

The United States Environmental Protection Agency, National Emission Standards for Hazardous Air Pollutants (US EPA NESHAP), 40 CFR Part 61 - Nov. 20, 1990, requires an owner or operator of a demolition or renovation project to thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos-containing materials (ACM) prior to the commencement of that project.

This inspection report was requested by Mr. Isaac White, Construction Manager with Innovative Construction Services (ICS) on behalf of Mr. Chris Ralston, Director III of the Facilities Management, Maintenance & Operations, and Resource Management department for the Sacramento City Unified School District (SCUSD).

The purpose of the inspection was to comply with US EPA NESHAP requirements and the Sacramento Metropolitan Air Quality Management District (SMAQMD) which has jurisdiction for this project site to determine if asbestos containing materials are present which may be impacted during an upcoming project, which will include the roof and exterior walls of Albert Einstein Middle School located at 9325 Mirandy Dr, Sacramento, CA 95826. The roof of the gymnasium building and adjacent locker rooms was not included in this survey.

Paints were also tested for lead content for compliance with Cal/OSHA lead in construction regulations. It is our understanding the school was originally constructed in the 1950's.

The attached drawings show approximate sample locations and also identify those bulk sample materials analyzed and found to contain asbestos greater than 1% with a (+) after the sample number. Materials analyzed and found to contain less than 1% asbestos or reported as none detected have a (-) after each sample number.

Materials are classified in the tables of this report as regulated asbestos containing material (RACM), Category I (CAT-I) or Category II (CAT-II) ACM, or asbestos containing construction material (ACCM), which included collecting multiple samples of some materials. Contractors and other individuals who view the sample locations and associated results indicated with either a (-) or a (+) on the drawing to make determinations take the risk of misidentifying a material and may arrive at determinations which are in direct conflict with the written findings of this report. This use of the drawing and the information provided on it relating to individual sample results in determining if a material does or does not contain asbestos is not recommended.

This is a summary of the report. The report must be read in its entirety, and the reader must review all the detailed information provided in the body of the report prior to making any interpretations, or conclusions pertaining to the information. Any conclusions made by the reader about the information provided in the body of this report which are contradictory or not included in this report are the responsibility of the reader.

Asbestos

On February 7, 2023 Entek conducted a survey specific to areas designated by the Owner which included the roofing materials and exterior walls throughout the campus. The roof of the gymnasium building and adjacent locker rooms was not included in this survey.

The results of testing for asbestos during this survey indicate asbestos is present in roof jack and curb mastic on the northeast classroom building and in the window glazing putty found on windows throughout campus. Specifics pertaining to individual materials can be found in later sections of this report.

Lead

Entek investigated existing paints and applied coatings in an effort to determine if lead was present in these materials. The materials detailed in the following list were all found or assumed to contain more than 5,000 parts per million (ppm) lead and are classified as lead-based paint (LBP). If more than 100 square feet of these materials are impacted by a "trigger task", prior notification to Cal/OSHA will be required.

- Blue over orange colored paint - Metal support columns associated with overhangs, covered walkways, and two story buildings throughout campus

The paints detailed in the following list were determined to contain lead in amounts less than 5,000 ppm and are classified as lead containing paint (LCP). Any work designated by California Occupational Safety Health Administration (Cal/OSHA) as a "trigger task" which will impact these paints, coatings, or materials must be done by properly trained personnel, in compliance with all lead related Cal/OSHA regulations and requirements.

- Orange colored paint - Metal flashing associated with roof level flashing at roof-to-wall connections throughout campus
- Blue colored paint - Wood doors throughout school
- Blue colored paint - Wood door frames throughout school
- Beige colored paint - Corrugated metal decking associated with covered walkway ceilings throughout campus

The paints detailed in the following list were determined not to contain lead above the analysis method detection limit of 100 ppm.

- Blue colored paint - Metal fascia throughout campus
- Blue colored paint - Metal drip edge roof flashing throughout campus
- Beige colored paint - Concrete walls throughout campus
- Beige colored paint - Wood stub-out foundations throughout campus
- Beige colored paint - Stucco ceilings at covered walkways throughout campus

Introduction

This report presents results of an asbestos and lead survey performed by Entek which included the roof and exterior walls of Albert Einstein Middle School located at 9325 Mirandy Dr, Sacramento, CA 95826. The roof of the gymnasium building and adjacent locker rooms was not included in this survey.

The inspection was conducted by Mr. Blake Howes on February 7, 2023. Mr. Howes is a Cal/OSHA Certified Asbestos Consultant (CAC) and a State of California Department of Public Health (CDPH) certified Lead Inspector/Assessor.

This report was prepared for Mr. Chris Ralston, Director III of the Facilities Management, Maintenance & Operations, and Resource Management department for the SCUSD at the request of Mr. Isaac White, Construction Manager with ICS.

Building Description

This survey was specific to exterior areas of the Albert Einstein campus and does not include any interior spaces. The campus consists of multiple classroom buildings, administration, gymnasium, and other school related facilities. There is a two story building located at the south side of the campus, with all other buildings single story.

Exterior finish materials include stucco, plaster, concrete, and metal components. All observed exterior windows are panes set into aluminum frames with glazing putty. Roof systems are rolled asphaltic throughout all surveyed areas. Mechanical systems are roof mounted HVAC units in many places, along with some centralized interior HVAC.

Asbestos Inspection and Sample Collection Protocols

Entek included specific exterior areas of the buildings included in this report, but used only limited methods to look within enclosed ceiling cavities during this investigation. Entek did include all suspect materials observed in, on, or associated with the areas included in this report.

Bulk samples were collected of various materials suspected to contain asbestos by utilizing a power drill and coring tube, cutting the materials with a razor knife, or use of other appropriate hand tools.

Miscellaneous materials were collected from each homogenous area in a manner sufficient to determine whether the material is or is not ACM as required in 40 CFR Part 763, Asbestos-Containing Materials in Schools; Final Rule and Notice, published October 30, 1987.

Approximate locations of all samples collected during this inspection are indicated on the “Bulk Asbestos Material Analysis Request Form for Entek”, which served as the chain of custody for the samples, and on the building diagrams attached to this report.

Asbestos Bulk Sample Results

There were several materials observed which are considered “suspect” under US EPA guidelines. Under current US EPA guidelines for conducting building inspections for ACM, all "suspect" materials must be assumed to contain asbestos until otherwise determined by laboratory testing.

The samples of materials suspected of containing asbestos were submitted to Asbestech, a laboratory located in Rancho Cordova, California. These samples were subsequently analyzed by polarized light microscopy (PLM) with dispersion staining.

The US EPA NESHAP and SMAQMD uses the terms Regulated Asbestos Containing Material (RACM), Category I, and Category II when identifying materials which contain asbestos in amounts greater than 1%. Cal/OSHA uses the term ACCM which indicates a manufactured construction material contains greater than 0.1% asbestos by weight by the PLM method. This definition can be found in Title 8, 1529.

All samples found to contain <1% asbestos by PLM analysis which are not identified as containing >1% asbestos, classified as RACM, CAT-I, or CAT-II materials in the following results tables were additionally analyzed using the 400 point count (PC) method with analysis by PLM. This additional analysis is required by NESHAP and enforced by SMAQMD. The PC method analysis results were used only to verify a material did not contain >1% asbestos as a single layer material, or as a composite result which is provided for materials such as sheet rock/drywall and joint compound used for wall/ceiling systems. A result reported as none detected or “trace” by the PC method only verified the initial PLM result of <1% and shall not be used to determine the identified material does not contain asbestos. Copies of Asbestech’s laboratory reports and accreditations are attached.

A total of 37 bulk samples were collected of all the materials considered to be "suspect" which were observed during this investigation. Some of those samples contained multiple layers which were individually analyzed to determine their asbestos content. Analysis of all samples collected was by PLM with dispersion staining. Results of the analysis are listed in the following tables:

Suspect Materials Found or Assumed TO Contain Asbestos					
Sample ID#’s	**Suspect Material**	**Asbestos Content/Type (%) by PLM**	**Location**	**NESHAP Classification**	**Total Estimated Quantity**
02A	Roof Jack/Curb & Penetration Mastic	**1-2% CHRYSOTILE**	Northeast Classroom Building (Estimated 20 Jacks Throughout Area)	CAT-I	80 Sq.
14A-G	Window Glazing Putty	<1% CHRYSOTILE	Throughout Campus	Cal/OSHA ACCM (Confirmed by 400 Point Count Analysis)	Unknown

Suspect Materials Found NOT TO Contain Asbestos or Considered Non-Suspect				
Sample ID#'s	**Suspect Material**	**EPA AHERA "Suspected" ACBM**	**Asbestos Content**	**Location**
01A-B	Composition Asphalt Rolled Roofing, Gray Roofing	Miscellaneous	NONE DETECTED	Northeast Classroom Building Roof
02B-E	Roof Jack/Curb & Penetration Mastic	Miscellaneous	NONE DETECTED	Throughout Campus Roofs EXCEPT Northeast Classroom Building Roof
03A-C	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	South 2 Story Building Roof
04A-C	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	Southwest 1 Story Classroom Building Roof
05A	Roof Patch Mastic with Silver Paint	Miscellaneous	NONE DETECTED	South 2 Story Building at 1st Floor Roof Perimeter
06A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	Southeast Round Building Roof
07A-D	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	Covered Walkway Roofs Throughout Campus
08A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	East Cafeteria Upper Roof
09A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	East Cafeteria Kitchen Lower Roof
10A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	West Classroom Buildings North Roof
11A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	West Classroom Buildings South Roof
12A	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	West Classroom Buildings, West Connector Hallway Roof
13A	Composition Asphalt/ Rubberized Rolled Roofing Patch	Miscellaneous	NONE DETECTED	West Classroom Buildings, East Covered Walkway Area Roof

NOTE: Any CAT-I or CAT-II materials identified in the previous tables which will be subjected to mechanical removal, must be considered RACM for the purposes of notification to SMAQMD and classification of waste. Removal of any CAT-I or CAT-II materials prior to demolition of a building is dependent upon how the materials will be impacted and if the impact will cause the materials to become friable. If any remaining CAT-I or CAT-II materials will become friable they must be removed prior to the initiation of demolition.

NOTE: Cal/OSHA regulates all materials containing greater than 0.1% asbestos. As a result, impact to materials identified as ACCM and ACM must be performed by properly asbestos trained personnel utilizing appropriate personal protection, work practices, as well as, properly constructed and demarcated work areas or containments, in accordance with Cal/OSHA asbestos regulations.

All sample number noted in the tables above start with ECG-23-6539-

The tables above provide an estimate of the amount of materials in square feet (Sq.) or linear feet (Ln.). Contractors are responsible for quantifying the exact quantity of materials impacted by the renovation or demolition and shall not rely on the quantities in the above tables.

US EPA AHERA uses three terms when determining the classification of a material for the purpose of sampling. These terms include miscellaneous, surfacing, and thermal system insulation (TSI).

Miscellaneous materials are building materials on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or TSI.

Surfacing materials are materials that are sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceiling and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

TSI is material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain, water condensation, or for other purposes.

The information provided in the tables of this report are for use by the Owner in determining where asbestos containing materials are located, and whether or not any future work may impact those materials. The information is also provided for use by any contractor who may perform work in areas impacting the materials listed in this report, and for use as appropriate by asbestos abatement contractors to provide costs related to work impacting ACM.

Any building materials which are considered “suspect” for containing asbestos which have not been identified in this report must be assumed to contain asbestos in amounts >1% until properly investigated and/or tested.

Materials commonly excluded from being suspected for containing asbestos include, but are not limited to: unwrapped pink and yellow fiberglass insulating materials or products,

foam insulation, bare concrete, wood, metal, plastic, or glass. All other types of building materials or coatings on the materials listed above are commonly listed as “suspect” and must be tested prior to impact by a Contractor. Work impacting these untested or newly discovered materials must cease until an investigation can be completed.

Asbestos Regulatory Requirements

US EPA

The property included in this survey report is located in Sacramento County. Sacramento Metropolitan Air Quality Management District (SMAQMD) has been given authority for enforcement of the NESHAP regulations by means of their own rules (Rule 902 Asbestos).

A demolition is the wrecking, taking out, or burning of any load supporting structural member. A renovation is everything else. Ten day written notification to the SMAQMD is required prior to the performance of any demolition project regardless of asbestos being present or not. This notification would also apply to any renovation project which involves the wrecking, taking out, or burning of any load bearing structural member during a renovation as well.

There is not a sufficient amount of ACM present to require a 10 day notification to the SMAQMD be submitted prior to starting work which will impact materials identified as RACM or CAT-I and CAT-II materials if they are made friable through mechanical means of removal. If more than 160 square feet, 260 linear feet or 35 cubic feet of RACM is planned for removal on the project, formal written notification to SMAQMD is required.

Cal/OSHA

Disturbance of any ACM or ACCM could generate airborne asbestos fibers and would be regulated by Cal/OSHA. Cal/OSHA worker health and safety regulations apply during any disturbance of ACM or ACCM by a person while in the employ of another. This is true regardless of friability or quantity disturbed.

If more than 100 square feet of ACCM and ACM does exist and will be impacted during the upcoming project, a licensed asbestos contractor, certified by the State of California, and registered with Cal/OSHA is required to perform the asbestos related removal work. Entek recommends a licensed asbestos contractor be used to remove ACCM even if less than 100 square feet of ACCM is being disturbed.

For compliance with Title 8, Section 341.9, the contractor must send written notice at least one day (24 hours) prior to start of any work which will impact any amount of asbestos to the local office for the State of California, Department of Occupational Safety and Health, and perform all work in accordance with Cal/OSHA requirements.

Lead Inspection, Sampling, & Results

A total of 11 bulk samples of the painted surfaces from various locations throughout the site were collected and submitted to MicroTest Laboratories. These samples were subsequently analyzed by atomic absorption spectrometry (AAS). Results of the analysis are listed in the following tables:

Paints/Coatings/ Materials Determined to be Lead Based Paint (LBP)		
Paint/Coating Color or Material	**Lead Content**	**Component/Location**
Blue over Orange Colored Paint	193,138 ppm	Metal Support Columns - Associated with overhangs, covered walkways, and two story buildings throughout campus

LBP - Materials/coatings/paints meeting the definition of lead-based paint as defined by the CDPH and the US EPA, currently defined as containing lead in concentrations equal to or greater than 1.0 mg/cm^2, 5,000 ppm, or 0.5% by weight.

Paints/Coatings/ Materials Determined to be Lead Containing Paint (LCP)		
Paint/Coating Color or Material	**Lead Content**	**Component/Location**
Blue Colored Paint	4,841 ppm	Wood Door - Classrooms Where Present
Blue Colored Paint	1,063 ppm	Wood Door Frame - Classrooms Where Present
Beige Colored Paint	1,276 ppm	Corrugated Metal Ceiling Deck - Covered Walkways Throughout Campus

LCP - Materials/coatings/paints which contain measurable amounts of lead. The disturbance of these materials/coatings/paints is regulated by Cal/OSHA.

Paints/Coatings/Materials Determined NOT TO Contain Lead	
Paint/Coating Color or Material	**Building Component**
Blue Colored Paint	Metal Fascia - Throughout Campus
Blue Colored Paint	Metal Drip Edge Roof Flashing - Throughout Campus
Beige Colored Paint	Exterior Concrete Walls - Throughout Campus
Beige Colored Paint	Exterior Wood Stub-Out Foundations (Assumed to be previous locations of exterior lockers)
Beige Colored Paint	Exterior Stucco - Covered Walkways at South 2 Story Building

Paints determined “NOT TO” contain lead for the purposes of this report are those samples which when analyzed did not indicate lead to be present at or above the limit of detection for the analysis method used. This limit of detection was 100 parts per million (ppm). As a result, any paints shown “NOT TO” contain lead will not require any special training or work

practices related to lead when impacted.

Lead Regulatory Compliance

Any upcoming project which may result in the disturbance of lead containing products or surfaces, but is not intended to remediate a lead hazard or specifically designed to remove LBP to reduce or eliminate a known hazard, would be considered "lead related construction work".

Lead related construction work does not fit the classification of a "lead abatement project" under CDPH Title 17 regulations. "*Abatement*" is defined in Title 17, Division 1, Chapter 8, Article 1 as "any set of measures designed to reduce or eliminate lead hazards or LBP for public and residential buildings, but does not include containment or cleaning." A *lead hazard* is defined in Title 17, Division 1, Chapter 8, Article 1 as "deteriorated LBP, lead contaminated dust, lead contaminated soil, disturbing LBP or presumed LBP without containment, or any other nuisance which may result in persistent and quantifiable lead exposure."

Lead related construction work means any "construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance of any residential or public building, including preparation and cleanup, that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead". (Title 17, California Code of Regulations, Division 1, Chapter 8, Article 1).

Currently, Cal/OSHA has not established a definition for LBP, nor have they established minimum concentrations where their regulations do not apply. Cal/OSHA regulates all construction activities involving materials containing lead, including LBP. These regulations are found in CCR, Title 8 Section 1532.1 (§1532.1) Lead in Construction.

Since Cal/OSHA has not established a concentration of lead in a product where their regulations do not apply, any disturbance to products containing lead come under the jurisdiction of Cal/OSHA and their regulations. Disturbance of paints/coatings or materials determined to be LBP may trigger a pre-work notification to Cal/OSHA if "trigger tasks" disturb 100 square feet or more of those paints/coatings or materials. Trigger tasks are described in Title 8 CCR 1532.1.

Limitations

Entek inspected only the specific designated areas identified by the Owner's representative to be included in the upcoming project, which did not include all interior and exterior areas of the buildings located at the campus. This survey is specific to the roofing materials and exterior walls throughout campus. The roof of the gymnasium and adjacent locker rooms was not included in this survey. As a result the information provided in this inspection report may not be used to extend the inspection results to areas not included in this report without additional review and sampling as necessary.

If any new materials not listed as having been sampled, or listed as assumed for containing asbestos in this report are discovered, the new material must be assumed to contain asbestos until properly inspected and tested for asbestos content.

Entek's policy is to retain a full copy of these written documents for three (3) years once the file is closed. At the end of the 3 year period the written files will be destroyed without further notice. It is suggested copies of the file(s) are maintained as per the District's policy.

Entek will be providing only this electronic copy of the report and its attachments for your use. However, if you would like a hard copy of this report please do not hesitate to ask. Entek will be happy to mail the report upon receipt of your request.

Thank you for choosing Entek for your environmental needs. Please call me at (916) 632-6800 if you have any questions regarding this report.

Prepared by: 

Blake Howes
Vice President
Cal/OSHA CAC #13-5015
CDPH I/A Certification #3315

Appendices

A. Asbestos Related Documents
B. Lead Related Documents
C. Backup Documentation

C:\Users\bhowes\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Sacramento City USD\23-6539 Einstein MS, Roof\Project Letters & Reports\Final Haz Mat Insp Rprt Einstein 2-24-23.wpd

APPENDIX A

ASBESTOS RELATED DOCUMENTS

- Bulk Asbestos Analysis Report From Asbestech
- Bulk Asbestos Material Analysis Request Form for Entek
- Asbestos Bulk Sample Location Drawing
- SMAQMD Asbestos Survey Form
- SMAQMD Renovation/Demolition Notification Form

ASBESTECH
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Job:
23-6539 Sac City USD
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Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-1
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-01A	Black composition asphalt rolled roofing, NE classroom bldg. west area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
01B	Black composition asphalt rolled roofing, NE classroom bldg. east area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
02A	Black roof jack/ penetration mastic, NW classroom bldg.	1-2 CHRYSOTILE	Tar Binder
	Northeast classroom building		
[redacted]	[redacted]		
[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES

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BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70202-1
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/13/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-02B	Black roof jack/ penetration mastic, 2 story south bldg.	NONE DETECTED	Tar Binder
02C	Black roof jack/ penetration mastic, 1 story SW classroom bldg.	NONE DETECTED	Tar Binder
02D	Black roof jack/ penetration mastic, east cafeteria kitchen lower roof	NONE DETECTED	Tar Binder
02E	Black roof jack/ penetration mastic, west covered walkway	NONE DETECTED	Tar Binder

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

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BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-1
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-			
[redacted]	[redacted]	[redacted]	[redacted]
03A	Black composition asphalt rolled roofing, south 2 story bldg. north area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES Jim Jungles

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Job:
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BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-2
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-03B	Black composition asphalt rolled roofing, south 2 story bldg. east area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
03C	Black composition asphalt rolled roofing, south 2 story bldg. south area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
04A	Black composition asphalt rolled roofing, SW 1 story classroom bldg. north area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
04B	Black composition asphalt rolled roofing, SW 1 story classroom bldg. west area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

ASBESTECH
11151 Sun Center Drive, Suite B
Rancho Cordova, California 95670
Tel.(916) 481-8902 asbestech@sbcglobal.net

Client:
Entek Consulting Group, Inc.
4200 Rocklin Rd., Suite 7
Rocklin, CA 95677

Job:
23-6539 Sac City USD
Albert Einstein MS, 9325 Mirandy Dr.
Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-3
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-04C	Black composition asphalt rolled roofing, SW 1 story classroom bldg. south area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
05A	Black roof patch mastic w/ silver paint, 2 story south bldg. roof perimeter	NONE DETECTED	Tar Binder Wollastonite
06A	Black composition asphalt rolled roofing, SE round bldg. (library) west area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
06B	Black composition asphalt rolled roofing, SE round bldg. (library) east area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
07A	Black composition asphalt rolled roofing, covered walkways SE area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

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Rocklin, CA 95677

Job:
23-6539 Sac City USD
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Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-4
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-07B	Black composition asphalt rolled roofing, covered walkways east area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
07C	Black composition asphalt rolled roofing, covered walkways north area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
07D	Black composition asphalt rolled roofing, covered walkways west area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
08A	Black composition asphalt rolled roofing, east cafeteria upper roof west area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

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Rocklin, CA 95677

Job:
23-6539 Sac City USD
Albert Einstein MS, 9325 Mirandy Dr.
Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-5
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-08B	Black composition asphalt rolled roofing, east cafeteria upper roof east area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
09A	Black composition asphalt rolled roofing, east cafeteria kitchen lower roof west area	NONE DETECTED	Tar Binder Fibrous Glass
09B	Black composition asphalt rolled roofing, east cafeteria kitchen lower roof east area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
10A	Black composition asphalt rolled roofing, west classroom bldgs. NE area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

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Job:
23-6539 Sac City USD
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Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-6
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-10B	Black composition asphalt rolled roofing, west classroom bldgs. NW area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
11A	Black composition asphalt rolled roofing, west classroom bldgs. SE area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
11B	Black composition asphalt rolled roofing, west classroom bldgs. SW area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

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Tel.(916) 481-8902 asbestech@sbcglobal.net

Client:
Entek Consulting Group, Inc.
4200 Rocklin Rd., Suite 7
Rocklin, CA 95677

Job:
23-6539 Sac City USD
Albert Einstein MS, 9325 Mirandy Dr.
Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-7
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-12A	Black composition asphalt rolled roofing, west classroom bldgs. west connector hallway area	NONE DETECTED	Tar Binder Fibrous Glass
	Gray roofing	NONE DETECTED	Cellulose Pumice
	Gray drywall	NONE DETECTED	Gypsum Fibrous Glass
13A	Black composition asphalt/ rubberized rolled roofing patch, west classroom bldgs. east covered walkway area	NONE DETECTED	Tar Binder Synthetics
14A	Gray window glazing putty, east cafeteria bldg. upper windows	<1 CHRYSOTILE	Calcite
14B	Gray window glazing putty, west gymnasium bldg. west locker room windows	<1 CHRYSOTILE	Calcite
14C	Gray window glazing putty, west classroom bldgs. south windows	<1 CHRYSOTILE	Calcite
14D	Gray window glazing putty, SW 1 story classroom bldg. central windows	<1 CHRYSOTILE	Calcite

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A),THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.

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Rocklin, CA 95677

Job:
23-6539 Sac City USD
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Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70191-8
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/10/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-14E	Gray window glazing putty, south 2 story bldg. central windows	<1 CHRYSOTILE	Calcite
14F	Gray window glazing putty, NE classroom bldg. north windows	<1 CHRYSOTILE	Calcite
14G	Gray window glazing putty, round bldg. (library) north windows	<1 CHRYSOTILE	Calcite

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

ASBESTECH
11151 Sun Center Drive, Suite B
Rancho Cordova, California 95670
Tel.(916) 481-8902 asbestech@sbcglobal.net

Client:
Entek Consulting Group, Inc.
4200 Rocklin Rd., Suite 7
Rocklin, CA 95677

Job:
23-6539 Sac City USD
Albert Einstein MS, 9325 Mirandy Dr.
Sacramento , Ca

BULK ASBESTOS ANALYSIS REPORT

LAB JOB # 70202-2
Date/Time Collected: 2/8/23
Date Received: 2/8/23

NVLAP Lab Code 101442-0
CDPH # 1153
Date Analyzed: 2/13/23

Sample No.	*Color/Description*	*% Type Asbestos*	*Other Materials*
ECG-23-6539-14A	Gray window glazing putty, east cafeteria bldg. upper windows	TRACE CHRYSOTILE	Calcite
14B	Gray window glazing putty, west gymnasium bldg. west locker room windows	TRACE CHRYSOTILE	Calcite
14C	Gray window glazing putty, west classroom bldgs. south windows	TRACE CHRYSOTILE	Calcite
14D	Gray window glazing putty, SW 1 story classroom bldg. central windows	NONE DETECTED	Calcite
14E	Gray window glazing putty, south 2 story bldg. central windows	TRACE CHRYSOTILE	Calcite
14F	Gray window glazing putty, NE classroom bldg. north windows	TRACE CHRYSOTILE	Calcite
14G	Gray window glazing putty, round bldg. (library) north windows	TRACE CHRYSOTILE	Calcite

NOTE: Samples 14A-14G were analyzed by quantitative Point Counting using a Chalkley Point Array over 400 non-empty points.

NVLAP LAB CODE 101442-0 LAB DIRECTOR: TOM CONLON ANALYST: JIM JUNGLES 

ENTEK

70191

BULK ASBESTOS MATERIAL *Analysis Request*

ENTEK CONSULTING GROUP, INC.
4200 ROCKLIN ROAD, SUITE 7
ROCKLIN, CA 95677
(916) 632-6800 PHONE
(916) 632-6812 FAX
mainoffice@entekgroup.com

Date of Sampling: February 8, 2023

Job Number: 23-6539

Client Name: Sac City Unified School District

Site Address: Albert Einstein Middle School
9325 Mirandy Drive
Sacramento, CA 95826

Lab: Asbestech

Collected by: Blake Howes

Turnaround Time: Friday, 2-10-23 by 5:00 pm

ANALYSIS REQUESTED: Asbestos by PLM with Dispersion Staining

Special Instruction: *Stop Analysis upon first positive result (>1%) for sample in a series. Also stop analysis upon first positive result (>1%) in the joint compound for sample series.*

Please e-mail results at mainoffice@entekgroup.com as soon as available and include copy of submittal with those results.

SAMPLE #	MATERIAL DESCRIPTION/LOCATION
ECG-23-6539-01A	Composition Asphalt Rolled Roofing - Northeast Classroom Building, West Area
ECG-23-6539-01B	Composition Asphalt Rolled Roofing - Northeast Classroom Building, East Area
ECG-23-6539-02A	Roof Jack/Penetration Mastic - Northwest Classroom Building
ECG-23-6539-02B	Roof Jack/Penetration Mastic - 2-Story South Building
ECG-23-6539-02C	Roof Jack/Penetration Mastic - 1-Story Southwest Classroom Building
ECG-23-6539-02D	Roof Jack/Penetration Mastic - East Cafeteria Kitchen Lower Roof
ECG-23-6539-02E	Roof Jack/Penetration Mastic - West Covered Walkway
ECG-23-6539-03A	Composition Asphalt Rolled Roofing - South 2-Story Building, North Area
ECG-23-6539-03B	Composition Asphalt Rolled Roofing - South 2-Story Building, East Area
ECG-23-6539-03C	Composition Asphalt Rolled Roofing - South 2-Story Building, South Area
ECG-23-6539-04A	Composition Asphalt Rolled Roofing - Southwest 1-Story Classroom Building, North Area
ECG-23-6539-04B	Composition Asphalt Rolled Roofing - Southwest 1-Story Classroom Building, West Area
ECG-23-6539-04C	Composition Asphalt Rolled Roofing - Southwest 1-Story Classroom Building, South Area

Northeast Classroom Building

Blake Howes

Delivered by: _____ **Date:** 2/8/23 **Time:** 9:59 **AM/PM**

Received by: _____ **Date:** 2/8/23 **Time:** 9:59 **AM/PM**

ENTEK

70191

BULK ASBESTOS MATERIAL *Analysis Request*

ENTEK CONSULTING GROUP, INC.
4200 ROCKLIN ROAD, SUITE 7
ROCKLIN, CA 95677
(916) 632-6800 PHONE
(916) 632-6812 FAX
mainoffice@entekgroup.com

Date of Sampling: February 8, 2023

Lab: Asbestech

Job Number: 23-6539

Collected by: Blake Howes

Client Name: Sac City Unified School District

Turnaround Time: Friday, 2-10-23 by 5:00 pm

Site Address: Albert Einstein Middle School
9325 Mirandy Drive
Sacramento, CA 95826

ANALYSIS REQUESTED: Asbestos by PLM with Dispersion Staining

Special Instruction: *Stop Analysis upon first positive result (>1%) for sample in a series. Also stop analysis upon first positive result (>1%) in the joint compound for sample series.*

Please e-mail results at mainoffice@entekgroup.com as soon as available and include copy of submittal with those results.

SAMPLE #	MATERIAL DESCRIPTION/LOCATION
ECG-23-6539-05A	Roof Patch Mastic with Silver Paint - 2-Story South Building, Roof Perimeter
ECG-23-6539-06A	Composition Asphalt Rolled Roofing - Southeast Round Building (Library), West Area
ECG-23-6539-06B	Composition Asphalt Rolled Roofing - Southeast Round Building (Library), East Area
ECG-23-6539-07A	Composition Asphalt Rolled Roofing - Covered Walkways, Southeast Area
ECG-23-6539-07B	Composition Asphalt Rolled Roofing - Covered Walkways, East Area
ECG-23-6539-07C	Composition Asphalt Rolled Roofing - Covered Walkways, North Area
ECG-23-6539-07D	Composition Asphalt Rolled Roofing - Covered Walkways, West Area
ECG-23-6539-08A	Composition Asphalt Rolled Roofing - East Cafeteria Upper Roof, West Area
ECG-23-6539-08B	Composition Asphalt Rolled Roofing - East Cafeteria Upper Roof, East Area
ECG-23-6539-09A	Composition Asphalt Rolled Roofing - East Cafeteria Kitchen Lower Roof, West Area
ECG-23-6539-09B	Composition Asphalt Rolled Roofing - East Cafeteria Kitchen Lower Roof, East Area
ECG-23-6539-10A	Composition Asphalt Rolled Roofing - West Classroom Buildings, Northeast Area
ECG-23-6539-10B	Composition Asphalt Rolled Roofing - West Classroom Buildings, Northwest Area

Delivered by: _____ **Date:** 2/8/23 **Time:** 9:59 AM/PM

Received by: _____ **Date:** 2/8/23 **Time:** 9:59 AM/PM

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70191

BULK ASBESTOS MATERIAL *Analysis Request*

ENTEK CONSULTING GROUP, INC.
4200 ROCKLIN ROAD, SUITE 7
ROCKLIN, CA 95677
(916) 632-6800 PHONE
(916) 632-6812 FAX
mainoffice@entekgroup.com

Date of Sampling: February 8, 2023

Job Number: 23-6539

Client Name: Sac City Unified School District

Site Address: Albert Einstein Middle School
9325 Mirandy Drive
Sacramento, CA 95826

Lab: Asbestech

Collected by: Blake Howes

Turnaround Time: Friday, 2-10-23 by 5:00 pm

ANALYSIS REQUESTED: Asbestos by PLM with Dispersion Staining

Special Instruction: *Stop Analysis upon first positive result (>1%) for sample in a series. Also stop analysis upon first positive result (>1%) in the joint compound for sample series.*

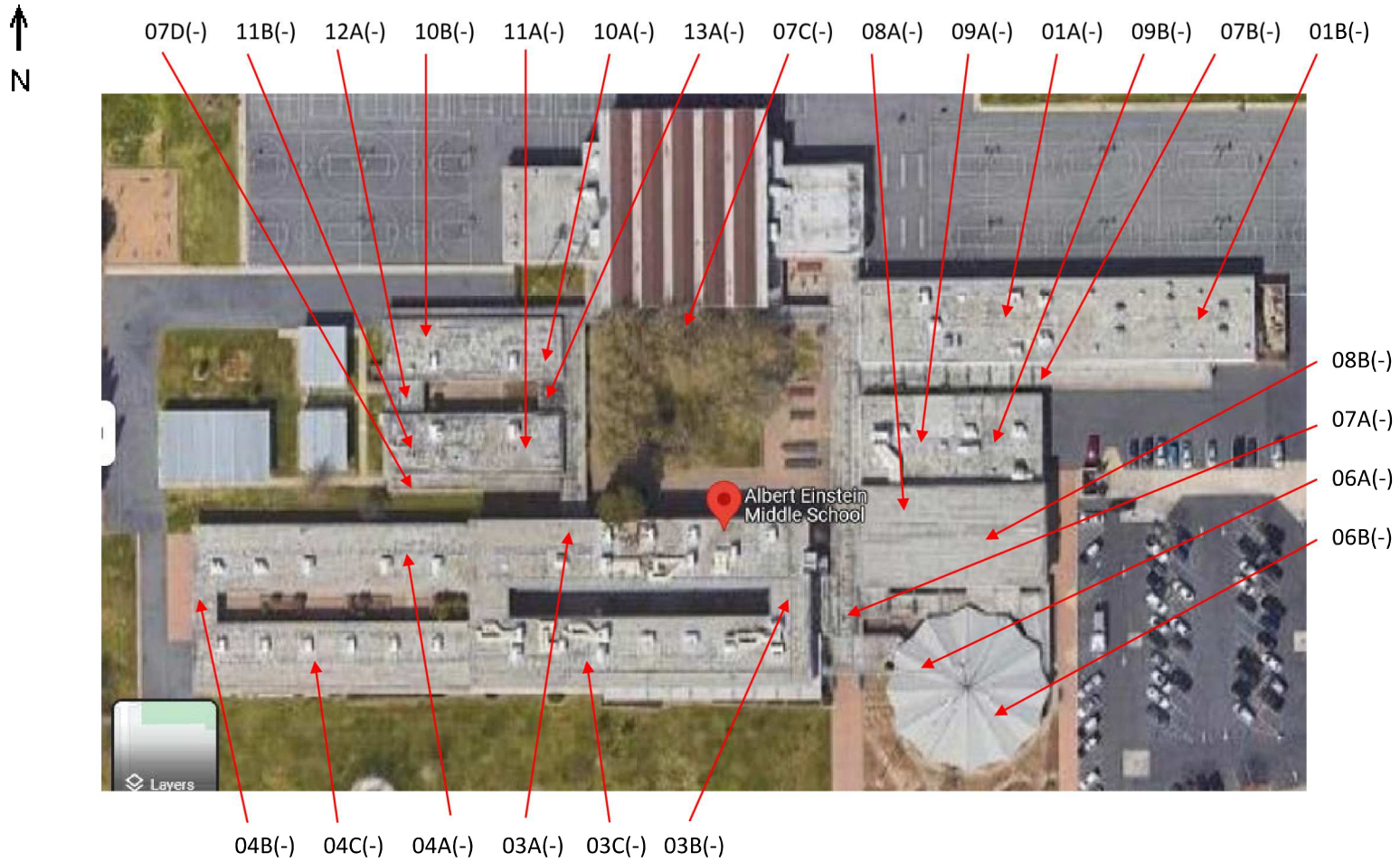
Please e-mail results at mainoffice@entekgroup.com as soon as available and include copy of submittal with those results.

SAMPLE #	MATERIAL DESCRIPTION/LOCATION
ECG-23-6539-11A	Composition Asphalt Rolled Roofing - West Classroom Buildings, Southeast Area
ECG-23-6539-11B	Composition Asphalt Rolled Roofing - West Classroom Buildings, Southwest Area
ECG-23-6539-12A	Composition Asphalt Rolled Roofing - West Classroom Buildings, West Connector Hallway Area
ECG-23-6539-13A	Composition Asphalt/Rubberized Rolled Roofing Patch - West Classroom Buildings, East Covered Walkway Area
ECG-23-6539-14A	Window Glazing Putty - East Cafeteria Building, Upper Windows
ECG-23-6539-14B	Window Glazing Putty - Gymnasium Building, West Locker Room Windows
ECG-23-6539-14C	Window Glazing Putty - West Classroom Buildings, South Windows
ECG-23-6539-14D	Window Glazing Putty - Southwest 1-Story Classroom Building, Central Windows
ECG-23-6539-14E	Window Glazing Putty - South 2-Story Building, Central Windows
ECG-23-6539-14F	Window Glazing Putty - Northeast Classroom Building, North Windows
ECG-23-6539-14G	Window Glazing Putty - Round Building (Library), North Windows

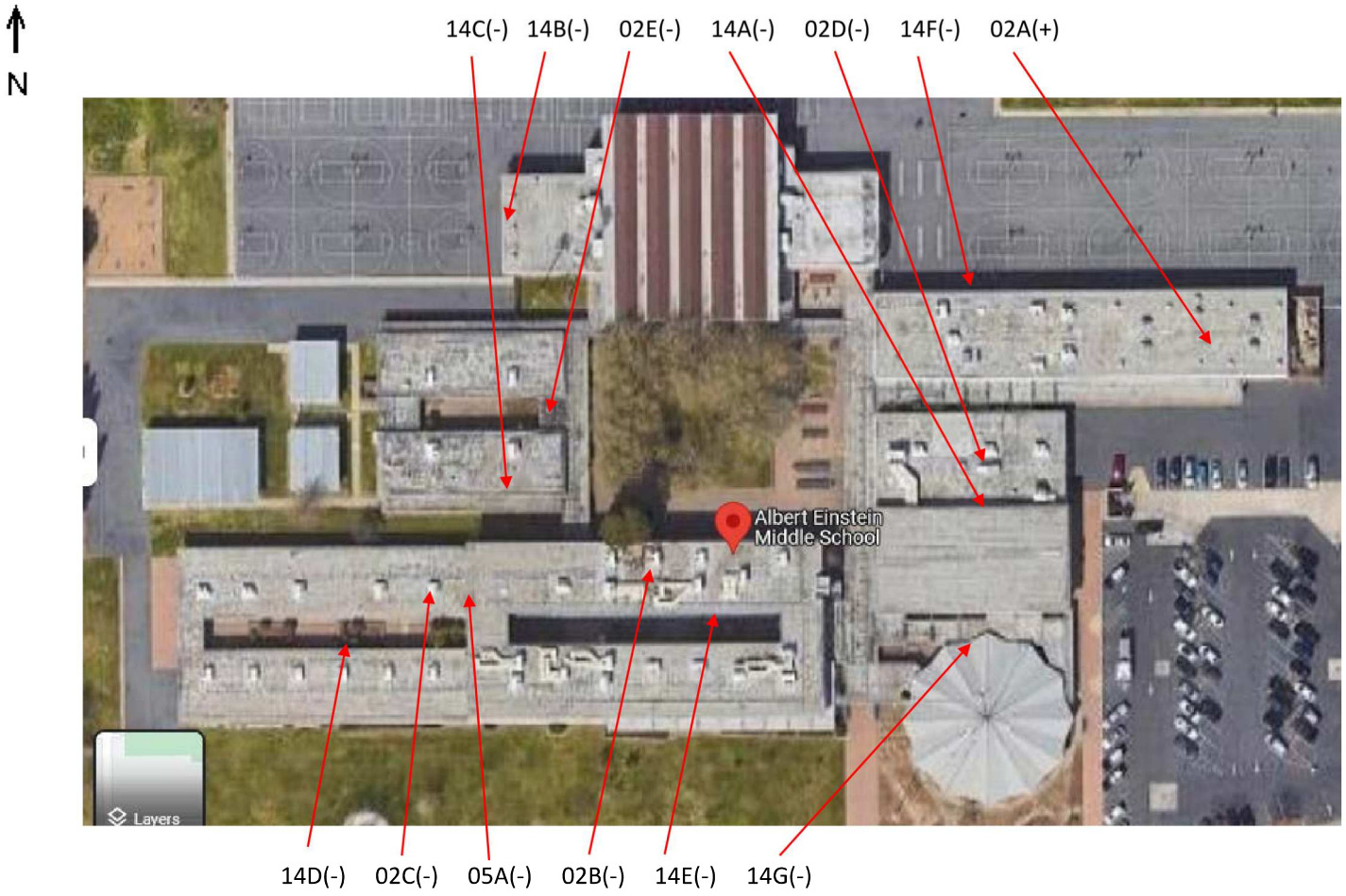
C:\Users\bhowes\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Sacramento City USD\23-6539 Einstein MS, Roof\Bulk Asb\Bulk Request 02-07-23.wpd

Delivered by: _____ **Date:** 2/8/23 **Time:** 9:55 AM/PM

Received by: _____ **Date:** 2/8/23 **Time:** 9:59 AM/PM



Sacramento City Unified School District Albert Einstein Middle School 9325 Mirandy Drive Sacramento, CA 95826	Entek Consulting Group, Inc. 4200 Rocklin Road, Suite 7 Rocklin, CA 95677 Map Not to Scale	Asbestos Bulk Sample Locations Collected by Blake Howes On February 7, 2023 Project Number 23-6539



Sacramento City Unified School District Albert Einstein Middle School 9325 Mirandy Drive Sacramento, CA 95826	Entek Consulting Group, Inc. 4200 Rocklin Road, Suite 7 Rocklin, CA 95677 Map Not to Scale	Asbestos Bulk Sample Locations Collected by Blake Howes On February 7, 2023 Project Number 23-6539

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Asbestos Survey Form

(See Instructions)

777 12th Street, 3rd Floor
Sacramento, CA 95814
Office (916) 874-4800
Fax (916) 874-4899
Email:
asbestos@airquaility.org

1. Purpose of Survey	X	Renovation		Demolition

2. Facility Information

Project Area(s) Description	Albert Einstein Middle School - Roof & Exterior Painting		
Address: 9325 Mirandy Drive		City: Sacramento	# of Structures: 9

3. Owner Information

Name	Sacramento City Unified School District		
Address: 5735 47th Avenue		City/State: Sacramento, California	Zip: 95824

Contact	Phone	Fax	Email
Chris Ralston	(916) 395-3970		chris-ralston@scusd.edu

4. Consultant Information — **Survey Date(s): February 7, 2023**

Company Name	Entek Consulting Group, Inc.		
Name: Blake Howes			DOSH #: 13-5015
Address: 4200 Rocklin Road, Suite 7		City/State: Rocklin, California	Zip: 95677

Phone	Fax	Email	Signature
(916) 632-6800	(916) 632-6812	bhowes@entekgroup.com	Blake Howes

5. Client Information (If different than owner) ☐ General Contractor ☐ Insurance Company ☐ Architect ☐ Property Manager ☐ Other _____

Name			
Address	City/State		Zip

Contact	Phone	Fax	Email

6. Have all of the suspect materials that will be disturbed been sampled? ■ Yes ☐ No

If no, explain why:

7. Summary of Total Asbestos Containing Material (ACM) Findings

Regulated Asbestos Containing Material (RACM) (Includes materials subject to known mechanical removal and fire damaged materials)			Category II		Category I	
Square Ft.	Linear Ft.	Cubic Ft.	Square Ft.	Linear Ft.	Square Ft.	Linear Ft.
0	0	0	0	0	80	0

To receive future SMAQMD Rule updates and changes affecting your industry (check one box):

☐ Please send e-mail notices to ☐ I will sign up myself at www.airquality.org/listserve/ to receive emailed notices.

■ I am already subscribed. ☐ I want the District to mail notices to the address on this application: ☐ Owner ☐ Consultant

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Asbestos Renovation/Demolition Notification Form

777 12th Street, 3rd Floor
Sacramento, CA 95814
Office (916) 874-4800
Fax (916) 874-4899
Asbestos@airquaility.org

1	Building Department Permit Application # (if known) : _____	■ ☐ ☐ ☐	Renovation (Do not complete Section 5) Demolition (Complete all sections) Ordered Demo - Attach ordered demo letter Emergency Demo - SMAQMD Emergency #._____

2	Contractor	Owner
	Address	Address
	City, State / Zip	City, State / Zip
	Email	Email
	Telephone	Telephone

3	Structure Name	Renovation Area	# of Floors
	Project Address	City / Zip	Year Built

4	Preference for return of form	☐ E-mail	☐ Other :

DEMOLITIONS ONLY - Start date must be at least 10 working days from the day of your postmark or hand delivery of this form.

5		Revision # 1 2 3 4 5 6 7 8 9 (circle)
	Start Date _____/_____/_____	New Start Date _____/_____/_____
	Completion Date _____/_____/_____	New Completion Date _____/_____/_____
	Method of Demo: (Check Applicable): ☐ Manual/Hand Tools ☐ Mechanical/Heavy Equipment ☐ Other	
	Procedure to be followed if RACM is found or Category II material becomes friable:	

I have read and understand the directions. The information on this form is true and accurate.
I certify that the asbestos survey conducted represents the facility as built.

6	Application Name (Print)	☐ ☐ ☐	Owner Rep / Agent Contractor	Permit may be issued on:
	Phone Number			
	Application Signature	Date		

Have DOSH Consultant complete and sign below OR attach completed Asbestos Survey Form and Consultant's report.

CONSULTANT USE ONLY

Company Name Entek Consulting Group, Inc.		Telephone (916) 632-6800	
Surveyor Name Blake Howes		DOSH # 13-5015	Survey Date 2-7-23
Analytical Method PLM by Dispersion Staining		Pt Count Materials <10% ■ Yes ■ No ☐ Declined by Client	
Amount of RACM	Square Feet 0	Linear Feet 0	Cubic Feet 0
Amount of Category I 80 Sq. Ft.		Amount of Category II 0	
Project Address 9325 Mirandy Drive		City Sacramento	Zip 95826
Suspect Materials Present? ■ Yes ☐ No		Consultant's Signature Blake Howes	

SMAQMD USE ONLY

Date Received / Date Postmark _____ Date Approved & Returned _____

Project #_____ Check #_____ Receipt #_____ Amount Paid _____ Staff _____

ENTEK

APPENDIX B

LEAD RELATED DOCUMENTS

- Bulk Lead Analysis Report From MicroTest
- Bulk Lead Material Analysis Request Form for Entek
- Lead Bulk Sample Location Drawing
- CDPH Lead Hazard Evaluation Report (Form 8552)

MicroTest Laboratories, Inc. | AIHA ELPAT #160934
3110 Gold Canal Dr, Ste. A, Rancho Cordova, CA 95670
PH 916.567.9808 | FX 916.404.0302
www.microtestlabsinc.com | service@microtestlabsinc.com

****for office use only****

Project ID

L31544-54

CLIENT INFORMATION

Company	Entek Consulting Group, Inc
Name	Ryan Metzen
Address	4200 Rocklin Road, Suite 7 Rocklin, CA 95677
Phone	916.632.6800
Email	mainoffice@entekgroup.com rmetzen@entekgroup.com

SAMPLE

Date	Wednesday, February 8, 2023
Time	

MicroTest Laboratories

Analytical Data

JOB SITE INFORMATION

Sampler	Blake Howes
Project	Sac City Unified School District
Site	Albert Einstein Middle School
Address	9325 Mirandy Drive Sacramento, CA 95826
Job #	23-6539

EPA METHOD 7420/7000B

Client Sample ID	Laboratory Sample ID	Client Sample Location / Description	Matrix	Results	Units	Reporting Limits	Results Comments	Units
ECG-23-6539-01Pb	L31544	Orange Colored Paint - Metal Flashing at 2-Story South Building, Roof Level	Paint	0.07%	Wt %	0.01%	674	PPM
ECG-23-6539-02Pb	L31545	Blue Colored Paint - Metal Fascia at 2-Story South Building, Roof Level	Paint	<0.01%	Wt %	0.01%	<100	PPM
ECG-23-6539-03Pb	L31546	Blue Colored Paint - Metal Drip Edge Flashing at 2-Story South Building, Roof Level	Paint	<0.01%	Wt %	0.01%	<100	PPM
ECG-23-6539-04Pb	L31547	Beige Colored Paint - Concrete Walls at East Cafeteria Building, Upper Area	Paint	<0.01%	Wt %	0.01%	<100	PPM
ECG-23-6539-05Pb	L31548	Blue over Orange Colored Paint - Metal Columns at 2-Story South Building, Ground Level	Paint	19.31%	Wt %	0.01%	193138	PPM
ECG-23-6539-06Pb	L31549	Beige Colored Paint - Wood Stub Out Foundation at 1-Story Southwest Classroom Building, Ground Level	Paint	<0.01%	Wt %	0.01%	<100	PPM
ECG-23-6539-07Pb	L31550	Beige Colored Paint - Stucco Ceiling at 2-Story South Building, Ground Level	Paint	<0.01%	Wt %	0.01%	<100	PPM
ECG-23-6539-08Pb	L31551	Beige Colored Paint - Concrete Wall at Gym Building, Ground Level North Side	Paint	<0.01%	Wt %	0.01%	<100	PPM
ECG-23-6539-09Pb	L31552	Blue Colored Paint - Wood Door at Northeast Classroom Building, West Side	Paint	0.48%	Wt %	0.01%	4841	PPM
ECG-23-6539-10Pb	L31553	Blue Colored Paint - Wood Door Frame at Northeast Classroom Building, West Side	Paint	0.11%	Wt %	0.01%	1063	PPM

Date Received:	Wednesday, February 8, 2023
Date Analyzed:	Wednesday, February 8, 2023
Date Reported:	Friday, February 10, 2023

Samples Received: 11

Samples Analyzed: 11

Analyst: **Erich Bowman**

Authorized Signatory: Kelly Favero - Lab Manager

This report applies to the standards and procedures indicated and to the specific samples analyzed. Samples have NOT been corrected for blank values. EPA 3050B Hotblock Preparaton Method

MicroTest Laboratories, Inc. | AIHA ELPAT #160934
3110 Gold Canal Dr, Ste. A, Rancho Cordova, CA 95670
PH 916.567.9808 | FX 916.404.0302
www.microtestlabsinc.com | service@microtestlabsinc.com

****for office use only****

Project ID

L31544-54

CLIENT INFORMATION

Company	Entek Consulting Group, Inc
Name	Ryan Metzen
Address	4200 Rocklin Road, Suite 7 Rocklin, CA 95677
Phone	916.632.6800
Email	mainoffice@entekgroup.com rmetzen@entekgroup.com

SAMPLE

Date	Wednesday, February 8, 2023
Time	

MicroTest Laboratories

Analytical Data

JOB SITE INFORMATION

Sampler	Blake Howes
Project	Sac City Unified School District
Site	Albert Einstein Middle School
Address	9325 Mirandy Drive Sacramento, CA 95826
Job #	23-6539

EPA METHOD 7420/7000B

Client Sample ID	Laboratory Sample ID	Client Sample Location / Description	Matrix	Results	Units	Reporting Limits	Results Comments	Units
ECG-23-6539-11Pb	L31554	Beige Colored Paint - Corrugated Metal Covered Walkway Ceiling Deck	Paint	0.13%	Wt %	0.01%	1276	PPM

Date Received:	Wednesday, February 8, 2023
Date Analyzed:	Wednesday, February 8, 2023
Date Reported:	Friday, February 10, 2023

Samples Received: 11

Samples Analyzed: 11

Analyst: **Erich Bowman**

Authorized Signatory:

Kelly Favero - Lab Manager

This report applies to the standards and procedures indicated and to the specific samples analyzed. Samples have NOT been corrected for blank values. EPA 3050B Hotblock Preparaton Method

ENTEK

BULK LEAD MATERIAL *Analysis Request*

ENTEK CONSULTING GROUP, INC.
4200 ROCKLIN ROAD, SUITE 7
ROCKLIN, CA 95677
(916) 632-6800 PHONE
(916) 632-6812 FAX
mainoffice@entekgroup.com

Date of Sampling: February 8, 2023

Lab: MicroTest Laboratories

Job Number: 23-6539

Collected by: Blake Howes

Client Name: Sac City Unified School District

Turnaround Time: 48 Hour

Site Address: Albert Einstein Middle School
9325 Mirandy Drive
Sacramento, CA 95826

ANALYSIS REQUESTED: Lead by Flame Atomic Absorption Spectroscopy

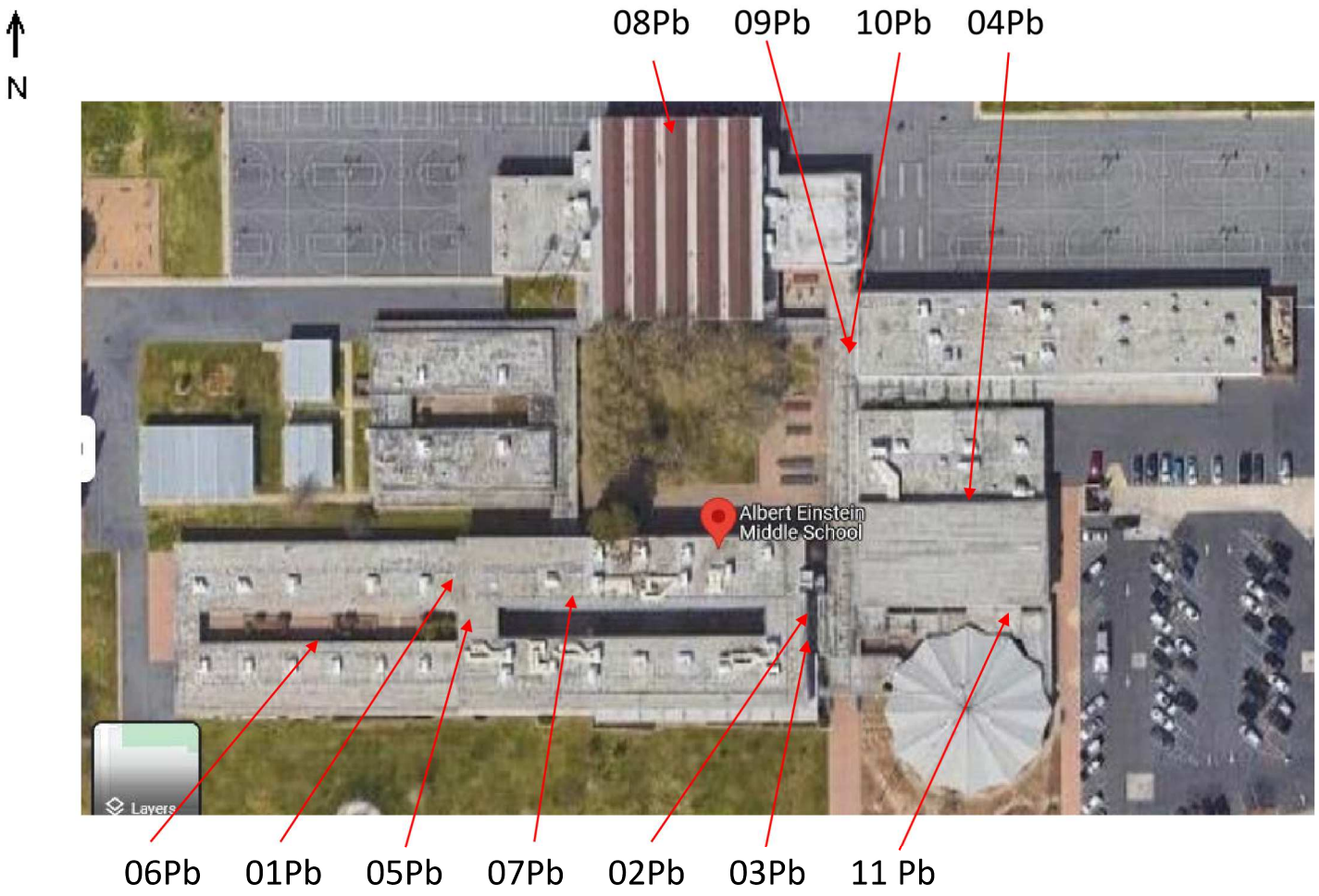
Special Instruction: *Please report result in PPM and % by weight. Please email results as soon as possible.*

SAMPLE #	MATERIAL DESCRIPTION/LOCATION
ECG-23-6539-01Pb	Orange Colored Paint - Metal Flashing at 2-Story South Building, Roof Level
ECG-23-6539-02Pb	Blue Colored Paint - Metal Fascia at 2-Story South Building, Roof Level
ECG-23-6539-03Pb	Blue Colored Paint - Metal Drip Edge Flashing at 2-Story South Building, Roof Level
ECG-23-6539-04Pb	Beige Colored Paint - Concrete Walls at East Cafeteria Building, Upper Area
ECG-23-6539-05Pb	Blue over Orange Colored Paint - Metal Columns at 2-Story South Building, Ground Level
ECG-23-6539-06Pb	Beige Colored Paint - Wood Stub Out Foundation at 1-Story Southwest Classroom Building, Ground Level
ECG-23-6539-07Pb	Beige Colored Paint - Stucco Ceiling at 2-Story South Building, Ground Level
ECG-23-6539-08Pb	Beige Colored Paint - Concrete Wall at Gym Building, Ground Level North Side
ECG-23-6539-09Pb	Blue Colored Paint - Wood Door at Northeast Classroom Building, West Side
ECG-23-6539-10Pb	Blue Colored Paint - Wood Door Frame at Northeast Classroom Building, West Side
ECG-23-6539-11Pb	Beige Colored Paint - Corrugated Metal Covered Walkway Ceiling Deck

C:\Users\bhowes\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Sacramento City USD\23-6539 Einstein MS, Roof\Bulk Pb\Bulk Request Pb 02-07-23.wpd

Delivered by: _____ **Date:** 2/18/23 **Time:** 10:03 AM/PM

Received by: _____ **Date:** 2/8/23 **Time:** 10:04 AM/PM



Sacramento City Unified School District Albert Einstein Middle School 9325 Mirandy Drive Sacramento, CA 95826	Entek Consulting Group, Inc. 4200 Rocklin Road, Suite 7 Rocklin, CA 95677 Map Not to Scale	Asbestos Bulk Sample Locations Collected by Blake Howes On February 7, 2023 Project Number 23-6539

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation February 7, 2023

Section 2 — Type of Lead Hazard Evaluation (Check one box only)

☑ Lead Inspection ☐ Risk assessment ☐ Clearance Inspection ☐ Other (specify)

Section 3 — Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]	City	County	Zip Code
9325 Mirandy Dr	Sacramento	Sacramento	95826

Construction date (year) of structure	Type of structure	Children living in structure?
1950's	☐ Multi-unit building ☑ School or daycare ☐ Single family dwelling ☐ Other	☐ Yes ☑ No ☐ Don't Know

Section 4 — Owner of Structure (if business/agency, list contact person)

Name	Telephone number
Sacramento City Unified School District - Mr. Chris Ralston	(916) 395-3970

Address [number, street, apartment (if applicable)]	City	State	Zip Code
5735 47th Avenue	Sacramento	California	95824

Section 5 — Results of Lead Hazard Evaluation (check all that apply)

☐ No lead-based paint detected ☑ Intact lead-based paint detected ☐ Deteriorated lead-based paint detected

☐ No lead hazards detected ☐ Lead-contaminated dust found ☐ Lead-contaminated soil found ☐ Other

Section 6 — Individual Conducting Lead Hazard Evaluation

Name	Telephone number
Entek Consulting Group, Inc. - Blake Howes	(916) 632-6800

Address [number, street, apartment (if applicable)]	City	State	Zip Code
4200 Rocklin Road, Suite 7	Rocklin	CA	95677

CDPH certification number	Signature	Date
3315	Blake Howes	2-14-23

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Gerald Moralez - 10718

Section 7 — Attachments

A. A foundation diagram or sketch of the structure indicating the specifc locations of each lead hazard or presence of lead-based paint;
B. Each testing method, device, and sampling procedure used;
C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

ENTEK

APPENDIX C

BACK UP DOCUMENTATION

- Photo Log
- Inspector Accreditations and Certifications
- Laboratory Accreditations for Asbestos and Lead Analysis

Photo Log

Job Number:	23-6539	Date:	February 7, 2023
Client:	Sacramento City Unified School District		
Site Address:	Albert Einstein Middle School - 9325 Mirandy Dr, Sacramento, CA 95826		

Roof of Northeast Classroom Building Showing Roof Jacks and Curbs

Window Frame Showing Glazing Putty

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

Blake W Howes
Name

Certification No. **13-5015**

Expires on **04/17/23**

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.

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
	Lead Inspector/Assessor	LRC-00003315	9/27/2023

Blake Howes

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101442-0

ASBESTECH

Rancho Cordova, 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 17025:2017. 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).

2022-07-01 through 2023-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ASBESTECH
11151 Sun Center Drive, Suite B
Rancho Cordova, CA 95670
Mr. Tommy Conlon
Phone: 916-481-8902 Fax: 916-481-3975
Email: asbestech@sbcglobal.net
http://www.asbestechlab.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 101442-0**

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

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Effective 2022-07-01 through 2023-06-30

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL LABORATORY ACCREDITATION

Is hereby granted to

MicroTest Laboratories, Inc.

3110 Gold Canal Drive

Rancho Cordova, CA 95670

Scope of the certificate is limited to the
"Fields of Accreditation"
which accompany this Certificate.

Continued accredited status depends on compliance with applicable laws and regulations, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2974**

Effective Date: **7/1/2022**

Expiration Date: **6/30/2024**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Program Manager
Environmental Laboratory Accreditation Program

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Fields of Accreditation

MicroTest Laboratories, Inc.

3110 Gold Canal Drive
Rancho Cordova, CA 95670
Phone: 9165679808

Certificate Number: 2974
Expiration Date: 6/30/2024

Field of Accreditation: 114 - Inorganic Constituents in Hazardous Waste			
114.345	002	Antimony	EPA 6020 B
114.345	003	Arsenic	EPA 6020 B
114.345	004	Barium	EPA 6020 B
114.345	005	Beryllium	EPA 6020 B
114.345	006	Cadmium	EPA 6020 B
114.345	008	Chromium	EPA 6020 B
114.345	009	Cobalt	EPA 6020 B
114.345	010	Copper	EPA 6020 B
114.345	012	Lead	EPA 6020 B
114.345	016	Nickel	EPA 6020 B
114.345	018	Selenium	EPA 6020 B
114.345	021	Thallium	EPA 6020 B
114.345	023	Zinc	EPA 6020 B
114.345	024	Molybdenum	EPA 6020 B
114.515	001	Lead	EPA 7420
114.545	001	Mercury	EPA 7471 B
Field of Accreditation: 115 - Leaching/Extraction Tests and Physical Characteristics of Hazardous Waste			
115.055	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.085	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
Field of Accreditation: 121 - Bulk Asbestos Analysis of Hazardous Waste			
121.010	001	Bulk Asbestos	EPA 600/M4-82-020

As of 7/1/2022 , this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

ASBESTOS REQUIREMENTS
TABLE OF CONTENTS

ASBESTOS REQUIREMENTS
TABLE OF CONTENTS

ALBERT EINSTEIN MIDDLE SCHOOL RE-ROOF & BEAUTIFICATION EXHIBIT A

SECTION 1. ASBESTOS BIDDING REQUIREMENTS

Part 1.1 - Site Investigations

By submitting a bid for asbestos related work, the asbestos abatement contractor acknowledges that they have investigated and satisfied themselves as to: a) the conditions affecting the work, including but not limited to, physical conditions of the site which may bear upon site access, handling, and storage of tools and materials, access to water, electric, or other utilities, or otherwise affect performance of required activities; b) the character and quality of all surface and subsurface materials or obstacles to be encountered, in so far as, this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Owner or a designated consultant, as well as, information presented in drawings and specifications included with this contract. Any failure by the asbestos abatement contractor to acquaint themselves with available information will not relieve them from the responsibility for estimating properly the difficulty or cost of successfully performing the work. The Owner is not responsible for any conclusions or interpretations made by the asbestos abatement contractor on the basis of the information made available by the Owner.

Part 1.2 - Insurance Requirements

Successful asbestos abatement contractor shall purchase and maintain insurance that will protect them from claims that may arise out of or result from the activities under this Contract, whether those activities are performed by the asbestos abatement contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

Successful asbestos abatement contractor shall submit proof of coverage, as well as, Subcontractors under the Worker's Compensation insurance system of the State of California or other similar benefit acts.

Successful asbestos abatement contractor shall submit a certificate of general liability insurance protecting against liability for bodily injury and property damage arising from asbestos abatement contractor’s activities under this contract.

Such certificate of insurance must contain the following provisions:

(a) The limit of liability shall not be less than $1,000,000.00 per occurrence for bodily injury and property damage liability combined.

(b) The Owner, Owner’s Agents, and Consultant must be named as additional insured, but only in respect to liability arising or resulting from activities under this contract.

(c) In the event of cancellation of the insurance policy, the Owner shall be given thirty days advance written notice.

(d) The insurance certificate must state that the insurance includes liability coverage for asbestos abatement work.

Successful asbestos abatement contractor’s Subcontractors shall submit a certificate of general liability insurance protecting against liability for bodily injury and property damage arising from Contractor's activities under this contract.

Such certificates of insurance must contain the following provisions:

(a) The limit of liability shall not be less than $1,000,000.00 per occurrence for bodily

injury and property damage liability combined.

(b) The Owner, Owner's Agents, and Consultant must be named as an additional insured, but only in respect to liability arising or resulting from activities under this contract.

(c) In the event of cancellation of the insurance policy, the Owner shall be given thirty days advance written notice.

Part 1.3 - Licenses and Qualifications Requirements

The asbestos abatement contractor shall be duly licensed in the State of California with the Contractors State License Board (CSLB) in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code, as amended. This includes certification for asbestos-related work, and all other trades or work required under this contract and within these specifications.

The asbestos abatement contractor shall submit a statement, signed by an officer of the company, containing the following information:

1. A record of any citations issued by Federal, State, or Local regulatory agencies within the last 3 years, relating to asbestos abatement activity. Include projects, dates, and resolutions.

2. A list of penalties incurred through non-compliance with asbestos abatement project specifications, including liquidated damages, overruns in scheduled time limitations, and resolutions.

3. Situations in which an asbestos-related contract has been terminated including projects, dates, and reasons for terminations.

4. A list of any asbestos-related legal proceedings/claims in which the Contractor (or employees scheduled to participate in this project) has participated or is currently involved. Include descriptions or role, issue, and resolution to date.

The asbestos abatement contractor is fully and totally responsible at all times for compliance with payment of prevailing wage rates pursuant to provisions of the California Labor Code, for compliance with Division 2, Part 7, Chapter 1, California Labor Code, including but not limited to Section 1776; and for compliance with California Labor Code, Section 1777.5 for all apprentice able occupations.

SECTION 2. ASBESTOS GENERAL REQUIREMENTS - DEFINITIONS

Abatement - Procedures beyond a special operations and maintenance program to control fiber release from asbestos-containing materials. Includes removal, encapsulation, enclosure, repair.

ACGIH - American Conference of Governmental Industrial Hygienists, 6500 Glenway Avenue, Building D-5, Cincinnati, Ohio 45211

AHERA - Asbestos Hazard Emergency Response Act

AIHA - American Industrial Hygiene Association, 475 Wolf Ledges Parkway, Akron, Ohio 44311

Air Filtration Device - See "Pressure Differential Unit"

Airlock - A system for permitting ingress and egress with minimum air movement between a contaminated

area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three (3) feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

Air Monitoring - The process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure normally utilized for asbestos follows the NIOSH Standard Analytical Method for Asbestos in Air P&CAM 239 or Method 7400. For clearance air monitoring, electron microscopy methods may be utilized for lower detection and specific fiber identification.

Air Sampling Professional - The professional contracted or employed by the Owner to supervise and/or conduct air monitoring and analysis schemes. This individual may also function as the Asbestos Project Manager, if qualified. Supervision of air sampling and evaluation of results should be performed by an individual certified in the Comprehensive Practice of Industrial Hygiene (CIH) or having specialized experience in air sampling for asbestos. Other acceptable Air Sampling Professionals include Environmental Engineers, Architects, Chemists and Environmental Scientists or others with equivalent experience in asbestos air monitoring. This individual shall not be affiliated in any way other than through this contract with the contractor performing the abatement work.

Ambient Air - The air outside the buildings and structures or the air as it normally exists in a space prior to abatement.

Amended Water - Water to which a surfactant has been added.

ANSI - American National Standards Institute, 1430 Broadway, New York, New York, 10018

Asbestos - Means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite grunerite (amosite), anthophyllite, actinolite, and tremolite.

Asbestos Containing Hazardous Waste - Materials defined by the State of California to be packaged, labeled, transported, and disposed of as an asbestos hazardous waste. This includes all friable asbestos-containing material over one-percent (1%) asbestos. This also includes all asbestos-containing material containing less than one-percent asbestos for which one or more bulk samples have not been point counted and found to contain less than one-percent (1%) asbestos.

Asbestos Containing Material (ACM) - Cal/OSHA - Material composed of asbestos of any type and in an amount greater than one percent (1%) either alone or mixed with fibrous or non-fibrous materials.

Asbestos Containing Construction Material (ACM) - a manufactured construction material containing greater than 0.1% asbestos by weight by the PLM method.

Asbestos Containing Waste - Asbestos-containing material or asbestos-contaminated objects requiring disposal.

Asbestos Project Manager (APM) - (Competent Person) - An individual qualified by virtue of experience and education, designated as the Owner's representative and responsible for overseeing the asbestos abatement project.

ASTM - American Society for Testing and Materials, 916 Race Street, Philadelphia, PA 19103.

Authorized Visitor - The Owner (and any designated representative) and any representative of a regulatory or other agency having jurisdiction over the project.

Bidder - A duly licensed and accredited asbestos contractor who was present at the bid-walk and has submitted a bid.

Cal/OSHA - California Division of Occupational Safety and Health.

Certified Asbestos Consultant (CAC) - A certified asbestos consultant as defined by the Department of Industrial Relations (Cal/OSHA).

Certified Industrial Hygienist (CIH) - An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.

Clean Room - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of workers' street clothes and clean protective equipment.

Competent Person - A person who is an accredited EPA Asbestos Contractor/Supervisor and whose accreditation is current.

Containment - Isolation of the work area from the rest of the building to prevent escape of asbestos fibers.

Contract Documents - Written contractual agreements between the Owner and the Contractor that pertain to the work on this project.

Contractor - The individual and/or legal entity and its subcontractors and employees of the contractor and subcontractor awarded the contract.

Contractor/Supervisor - A person who successfully completed an initial U.S. EPA and/or state-approved five-day AHERA accreditation course and who has maintained that training through approved annual refresher training, and possesses current and valid AHERA accreditation documentation as a AHERA accredited Contractor/Supervisor.

Class I, II, III, or IV Work - Work classes described in 8 CCR 1529 that describe different levels of asbestos work.

Critical Barrier - Critical Barriers used to restrict water and air flow. Critical Barriers are the barriers placed over openings in the walls and ceilings of a work area in order to ensure that airborne fibers cannot escape the work area via these openings. The Contractor will construct impermeable barriers at all exits or openings, including doorways, duct chases, mechanical shafts, elevator shafts, floor openings, drains, and the like, so that all possible exit or entrance routes are effectively barricaded and sealed. Unless otherwise specified in the Contract documents, critical barriers shall be constructed of at least one layer of 6-mil thick poly.

Critical Barrier Negative Pressure Test - Required test for negative pressure with only critical barriers and air filtration units installed. This test must be conducted prior to the installation of cleaning barriers, but may be conducted with or without the decontamination unit in place.

Decontamination Enclosure System - (Also known as Decon or Waste Transfer Decon) A series of connected rooms designed for the decontamination of workers and equipment that is separated from the work area and from each other by z-flapped curtained doorways. This unit shall be constructed with at least six-mil poly for the floors, walls, and ceiling. All decontamination enclosure systems used for worker entry and exit shall be equipped with a shower.

Demolition - The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations.

DOP - Dispersed Oil Particulate which are normally used as an agent for testing the efficiency of HEPA filters.

Dust or Debris - Any visible dust or debris remaining in an abatement area will be considered asbestos-containing residue.

Encapsulant - A liquid material which can be applied to asbestos-containing material which controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant).

EPA - U.S. Environmental Protection Agency

Equipment Room - A contaminated area or room which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.

Exterior of Containment HEPA Filtered Pressure Differential Unit - An air-purifying unit positioned outside, rather than inside the regulated work area. The face, or filter portion of the unit is integrated within the work area, and the remainder of the unit (housing, wheels, rivets, control panel, etc.) is located outside of the work area. This allows filters on the air intake to be changed from within the regulated area but access to the machine itself is available to those outside the area. Pressure differential units which pass DOP testing across the HEPA filter, but fail at rivets, control panels, wheels, etc. may be used in this fashion as long as the failure point of the unit can remain on the exterior of containment while the face of the unit and filters are inside containment.

Facility - Any institutional, commercial or industrial structure, installation, or building.

Facility component - Any pipe, duct, boiler, tank, reactor, turbine, or furnace at or in a facility or any structural member or a facility.

Fed OSHA or OSHA - Federal Occupational Safety and Health Administration.

Fixed object - A piece of equipment or furniture in the work area which cannot be removed from the work area.

Friable asbestos - Asbestos-containing material which can be crumbled to dust when dry, under hand pressure or by mechanical means.

Glove Bag Technique - A method with limited applications for removing small amounts of friable asbestos-containing materials from ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces. The glove bag is constructed of 6 mil transparent polyethylene with two inward projecting long sleeves, an internal tool pouch, and an attached, labeled receptacle for asbestos waste.

HVAC - Heating, ventilation and air conditioning system.

HEPA Filter - A high efficiency particulate air filter capable of removing particles 0.3 microns in diameter from an air stream with 99.97% efficiency.

HEPA Vacuum - A vacuum system equipped with HEPA filtration.

Lock-down - To mist the air and to wet surfaces with an agent designed to bind asbestos fibers together.

Magnehelic gauge - Instrument for measuring the static air-pressure differential across a barrier.

Manometer - See "Magnehelic gauge".

Mini-Enclosure - Mini-enclosures shall be constructed of 6 mil polyethylene (attached with tape and/or glue

to walls and floors) and shall be small enough for 1-2 workers who can enter the enclosure, complete the abatement exercise, pass out the containerized debris and exit.

Monitoring - May include:

a) Visual inspection for the presence of visible emissions; or
b) Air monitoring performed in accordance with accepted methods;
c) Core samples of encapsulated or bridged materials.
d) Bulk sampling of soil during and following abatement.
e) Sampling substrata following abatement.

Movable Object - An unattached piece of equipment or furniture in the work area which can be removed from the work area.

NVLAP - National Voluntary Laboratory Accreditation Program.

NESHAP - The National Emissions Standards for Hazardous Air Pollutants (40 CFR Part 61, Nov. 20, 1990)

NIOSH - The National Institute for Occupational Safety and Health CDC-NIOSH, Building J N.E. Room 3007, Atlanta, GA 30033

Outside Air - The air outside buildings and structures.

Owner - The Owner or Owners authorized Representative.

PCM - Phase contrast microscopy according to NIOSH Method 7400.

Plasticize - See "Poly".

Poly - Polyethylene sheeting. Used to cover floors, walls, ceilings, create critical barriers, and seal open vents on mechanical systems, etc. Note: All poly must be flame-retardant.

Pressure Differential Unit (PDU) - Also called negative air units. A portable exhaust system equipped with HEPA filtration and capable of exhausting air out the asbestos work area to create a negative pressure work environment..

Regulated Area - means an area established by a Contractor to demarcate areas where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit. Additionally “Regulated Area” means any measure used to restrict access to an area where personnel impacting asbestos-containing materials are required to wear respiratory protection and/or protective clothing by the project specifications regardless of airborne asbestos concentration levels.

Regulations - shall include but not be limited to:

a. U.S. Environmental Protection Agency Regulations for Asbestos (Title 40, Code of Federal Regulations, Part 61, Subparts A & B)

b. U.S. Environmental Protection Agency, Office of Toxic Substances, Asbestos-Containing Materials in School Buildings, A Guidance Document, Parts 1 & 2.

c. Title 8, Chapter 4, Subchapters 1 through 21, California Administrative Code, General Industry Safety orders, Section 5208 "Asbestos" or the applicable sections of the Federal Asbestos Regulations. Cal/OSHA Construction Safety Orders, Section 1529.

d. "Asbestos Hazard Emergency Response Act", U. S. Environmental Protection Agency, 40 CFR, Part 763. Final Rule and Notice.

e. Applicable local county Air Pollution Control Owners and Air Quality Management Districts.

Removal - The stripping of any asbestos-containing materials from surface or components of a facility.

Renovation - Altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or taken out are excluded.

Shower Room - A room between the clean room and the equipment room in the decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination. The shower room must be equipped with an overflow pan to contain water splashed, leaked or spilled out of the shower unit.

Staging Area - Either the holding area or some area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

Structural Member - Any load-supporting member of a facility, such as beams and load-supporting walls or any non-load-supporting member, such as ceilings and non-load supporting walls.

Submittals - Pre, interim, and post job documents submitted by the contractor to Owner/Owner's Representative as indicated in General Requirements and Bidding Requirements.

Surfactant - A chemical agent added to water to improve wetting and penetration into asbestos materials.

TEM - Transmission Electron Microscopy according to AHERA specifications for Level II analysis.

Visible emissions - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

Waste Load-out/Transfer System - A decontamination system utilized for transferring containerized waste from inside to outside of the work area. A series of three connected rooms used for the load-out of asbestos-containing materials that have been properly containerized. The waste load out chamber system shall normally consist of three connected chambers adjacent to the work area. Each chamber shall be constructed with six-mil thick poly for the floors, walls, and ceiling

Wet Cleaning - The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.

Work Area - Designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area is a work area which has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area which has not been plasticized nor equipped with a decontamination enclosure system.

Worker - Contractor employee who has completed course work and passed the exam for an EPA accredited, AHERA asbestos abatement worker. Certificate must be current.

SECTION 3. NOTIFICATIONS, SUBMISSIONS, POSTINGS

Part 3.1 - Notification

Prior to commencement of work the Contractor shall send notices of work to be completed to the agencies listed below with a copy of each to be provided to the Owner or its representative at the pre-construction meeting.

For compliance with 40 CFR part 61.146 of Subpart M, send notice at least 10 working days prior to start of work to the following appropriate agencies if trigger quantities of RACM are met or for a demolition:

Sacramento Metropolitan AQMD
777 12th Street, Third Floor
Sacramento, CA 95814-1908
Phone: (916) 874-4800
Fax: (916) 874-4899

U.S. EPA - Region IX
Asbestos NESHAP Notification (Air 5)
75 Hawthorne Street
San Francisco, California 94105
Tel (415) 947-4182

For compliance with Title 8, California Administrative Code, Construction Safety Order 1529, Asbestos Regulations send written notice at least one day prior to start of work to:

State of California
Department of Occupational Safety and Health (Cal/OSHA)

These notices shall include, at a minimum, the name and address of the Contractor, the name and address of the work site, the type of work to be done including the percent asbestos content of the material, the methods used to prevent migration of the fibers, personal protective measures, the number of his workers involved, any union representation of the workers and the methods of disposal including the names and EPA numbers of both the certified hauler and the waste disposal site. The notices shall also include start and finish dates. Changes in start and completion dates shall be reported immediately to the proper agency. Use forms provided by agency whenever possible.

Part 3.2 - Pre-Construction Submittals

Submit copies of documents required to be included in the Bidding Requirements. At a minimum these documents will include:

1. Copy of State of California Contractor License Issued by CSLB
2. Copy of State of California CSLB Active License
3. Copy of State of California CSLB Asbestos Certification
4. Copy of Department of Industrial Relations; Division of Occupational Safety and Health; Certificate of Registration for Asbestos-related Work
5. Copy of signed statement from company officer listing citations and pending proceedings against the Contractor, or if there have been no citations, a copy of the statement that no actions by regulatory agencies have occurred in the last three years signed by an officer of the company.

Submit copies of insurance certificates which meet requirements as outlined in Section 1, Part 1.2, of this Specification.

Submit copies of notifications to government agencies.

Submit proof satisfactory to the Owner that required permits have been acquired applicable to the project being performed and specific to the project site and location. If no city, county, or other permits for parking, waste container location, or variances for scheduled work hours are required this should be stated in writing and submitted to the Owner.

Submit Sub-contractors information or statement that Sub-contractors will not be required or used during this project. This statement should also include that if it becomes necessary to use a Sub-contractor during this project that Sub-contractor will not be allowed to perform work until all required documentation has been submitted for review by the Owner or Owner's CAC, and the Contractor receives written approval for use of the Sub-contractor on this project.

Submit a complete list of all rented equipment, or equipment expected to be rented from an outside contractor for use in "Regulated Areas", "Work Areas", or "Containments", where the equipment may be exposed to elevated levels of airborne asbestos. If no equipment is to be rented a statement should be submitted stating no equipment will be used on the project. The statement should also include that if it becomes necessary to use rented equipment that written statements from each rental company will be provided to the Owner prior to its use, indicating the rental companies acknowledgment that the equipment is provided for and may be used in areas where airborne levels of asbestos may be present.

Submit non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments. This list of numbers shall also include the Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor.

Submit detailed written directions from the project site to the medical facility to be used in case of an emergency. Also include a map which sufficiently shows the route to be taken from the site to the designated medical facility.

Submit written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.

Submit detailed information on preparation of work area, personal protective equipment, employee experience, training and assigned responsibilities during the project. Also list decontamination procedures for personnel, work area and equipment, abatement methods and procedures, required air monitoring program, procedures for handling and disposing of waste materials and procedures for final decontamination and cleanup.

Submit a detailed work schedule. The schedule shall have, as a minimum, the work area and the day/month for beginning and terminating work in each work area. During progress of work, it shall be the Contractor's responsibility to keep the schedule current and up to date.

Submit documentation satisfactory to the Owner that the Contractor's employees, including foremen, supervisor, and any other company personnel or agents who may be exposed to airborne asbestos fibers or who may be responsible for any aspects of abatement activities, have received required US EPA AHERA training.

Submit documentation from physician that all employees or agents who may be exposed to airborne asbestos in excess of background levels have been provided with an opportunity to be medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects. In addition, document that personnel have received medical monitoring as required by Cal/OSHA regulations. The Contractor must be aware of and provide information to the examining physician

about unusual conditions in the workplace environment (e.g., high temperatures, humidity, chemical contaminants) that may impact on the employee's ability to perform work activities.

Submit documentation of respirator fit-testing for all Contractor employees and agents who must enter any work area where asbestos-containing materials may or will be impacted. This fit-testing shall be in accordance with qualitative procedures as required by OSHA regulations or be quantitative in nature. Documentation pertaining to NIOSH approvals for all respiratory protective devices utilized on site shall also be included.

Submit documentation listing the name and site address of the waste facility designated to receive asbestos-containing waste generated during this project. This documentation shall also include the EPA Identification number, and a copy of the current permit authorizing the waste facility to accept and dispose of asbestos-containing waste.

Submit manufacturers' certifications that high efficiency particulate air (HEPA) vacuums, pressure differential units and other local exhaust ventilation equipment conform to ANSI Z9.2-79.

Submit name of laboratory/person to be used for Phase Contrast Microscopy (PCM) analysis and copy of current NVLAP Certificate of Accreditation (if applicable), and most recent NIOSH Proficiency Analytical Testing Program results.

Submit a written statement that OSHA monitoring will be performed for all asbestos-related activities performed during this project. This statement must be on company letterhead, dated, include name of the site or project being worked on, and signed by an authorized agent of the company performing the asbestos-related work.

Part 3.3 - Submittals During the Work Process

Not Applicable

Part 3.4 - On-Site/Clean-Room Area Postings and Documentation

The following items shall be posted at the entrance to “Regulated Areas”, “Work Areas”, and “Containments”, or in the possession of the Contractor’s on-site supervisor where respiratory protection or protective clothing is required by this Specification.

A Cal/OSHA Information poster and a Cal/OSHA Construction Site poster.

A copy of the CAL-OSHA and the local AQMD/APCD or EPA NESHAP Notification (if applicable).

Non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments. This list of numbers shall also include the Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor. Detailed written directions from the project site to the medical facility to be used in case of an emergency. Also a map which sufficiently shows the route to be taken from the site to the designated medical facility.

Written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.

Part 3.5 - Job Site Documents

The following shall be in the possession of the Contractor’s supervisor at each job site:

1. All contract specifications to include, change orders, etc. Contractor competent person must sign a document stating he has full knowledge of all Sections included in this specification.

2. Written Injury and Illness Prevention Program.
3. Written Respiratory Protection Program
4. An updated list of all contractor employees who have worked on this job.
5. List of all US EPA AHERA competent employees (supervisors).
6. Training records
7. Medical records
8. Respiratory fit test records

Part 3.6 - Project Close-out Documents

Contractor shall submit post-construction submittals to Owner/Owner's Representative within thirty (30) days of the completion of asbestos-related work. This documentation shall include at a minimum any and all applicable documents as outlined in Part 3.2 and Part 3.3 of this Section. In addition the Contractor should consult and submit as applicable documents identified in Section 24, Part 24.3 - Post Construction Submittal List

SECTION 4. SITE SECURITY

The work area is to be restricted to authorized, trained and protected personnel. A list of authorized personnel shall be established prior to job start and posted in the clean room of the work decontamination facility, or in the possession of the on-site supervisor for the Contractor.

Access to all "Regulated Areas", "Work Areas", and "Containments" shall be through a designated entry point. All other means of access (doors, windows, hallways, etc.) shall be blocked or locked so as to prevent entry to or exit from these areas. The only exceptions for this rule are the waste pass out air-lock, and emergency exits in case of fire or accident.

Storage of debris will be such that access to it is limited to the Contractor. Lockable bins shall be utilized and they shall be locked at all times except when loading occurs. No soft covers will be allowed for any storage containers. When a container with rolling tops is being used all access points to the interior of the container must be secured by the Contractor with locks of sufficient strength to require special effort to gain access to the interior of the waste container.

SECTION 5. EMERGENCY PLANNING

Emergency planning and procedures shall be developed by the Contractor and shall include considerations of fire, explosion, toxic atmospheres, electrical hazards, slips, trips and falls, and heat related injury and agreed to by Contractor and Owner prior to abatement initiation. These emergency procedures shall be established and presented to all employees and the Owner prior to the beginning of any work. A written emergency plan shall be posted or in the possession of the on-site supervisor for the Contractor regardless of the work being performed.

A copy of the Contractor's written Injury and Illness Prevention Program shall be posted or in the possession of the on-site supervisor for the Contractor regardless of the work being performed.

Employees shall be trained in evacuation procedures in the event of workplace emergencies. Telephone numbers of all emergency response personnel shall either be in the possession of the on-site supervisor, or be prominently posted in the clean change area and equipment room, along with the locations of the nearest telephone indicated on a map or diagram.

At least two fire extinguishers shall be present on site and in close proximity to the work being performed regardless of the type of work being conducted. At least one fire extinguisher shall be present outside of any containment. Additional extinguishers shall be distributed according to Cal/OSHA requirements or as identified

in this Specification.

SECTION 6. PRE-CONSTRUCTION MEETING

A pre-construction meeting will be held at a time and location to be determined by the Owner. The successful Bidder, his on-site supervisory personnel, and Air Sampling Professional (if applicable), representatives of the Owner, Owner's Representative, and other individuals as necessary shall be present at this meeting.

At this meeting the Contractor shall provide all required submittals, as indicated above in Section 3, Part 3.2. The Contractor should use the Pre-Construction Submittal List provided in Section 24, Part 24.1 to assure all required submittals are included in his submittal package.

SECTION 7. MATERIALS AND EQUIPMENT

Part 7.1 - Contractor Equipment and Supplies

Deliver all consumable materials in the original packages, containers or bundles bearing the name of the manufacturer and brand name (where applicable). These must be approved by the Owner. Polyethylene (Poly) sheeting, of appropriate thicknesses for walls, floors, and ceilings, (4 mil's thick for walls, 10 mil's thick for lining of waste containers, 6 mil's thick for floors and all other uses), shall be provided in widths selected to minimize the frequency of joints.

All poly shall be flame-retardant (fire-rated) regardless of its designated use inside or outside any building.

Poly sheeting utilized for worker decontamination enclosure shall be opaque white or black in color and each layer shall be a minimum of 6 mil thick. Modesty barriers are to be erected whenever and wherever the Owner's CAC determines one is needed.

Disposal bags shall be constructed of 6 mil poly with labels required by OSHA, CDPH, Toxic Substance Control regulations. Disposal drums shall be metal or fiber board with locking ring tops to be used only if required and/or allowed by selected waste facility.

Stick-on labels as per DTSC, DOT and OSHA requirements for disposal drums shall be provided.

Warning signs as required by OSHA shall be provided and posted per regulations.

Surfactant (wetting agent) shall be a 50/50 mixture of polyoxyethylene ether and polyoxyethylene ester, or equivalent, mixed in a proportion of one (1) fluid ounce to five (5) gallons of water or as specified by manufacturer. If amphibole asbestos in present in the materials being removed, the Contractor shall use a surfactant that is designed to wet the materials. This information shall be submitted to the Owner's CAC before the start of the project.

An adequate number of respirators for the work force shall be on hand. These respirators will include, when specified:

a. Type "C" air-supplied respirators in positive pressure or pressure demand mode with full face pieces and HEPA-filtered disconnects.

b. Full-face powered-air respirators with HEPA-filters.

c. Half-face or full face respirators with HEPA filters.

All respirators shall be NIOSH-approved and be equipped with supplies for immediate replacement of defective parts.

Full body disposable protective clothing, including head, body, and foot coverings consisting of material impenetrable by asbestos fibers shall be provided to all workers and authorized visitors in sizes adequate to accommodate movement without tearing.

Additional safety equipment such as hard hats, eye protection, safety shoes, disposable PVC gloves, etc., as necessary shall be provided to all workers and authorized visitors.

Non-skid footwear shall be provided to all abatement workers.

If launderable clothing is to be worn underneath disposable protective clothing, it shall be provided by the Contractor to all abatement workers. Laundering must occur in accordance with applicable OSHA requirements.

A sufficient supply of scaffolds, ladders, lifts and hand tools (e.g., scrapers, wire cutters, brushes, utility knives, wire saws, etc.) shall be provided as needed.

Rubber dustpans and rubber squeegees shall be provided for cleanup.

A sufficient supply of HEPA-filtered vacuums shall be provided to meet the specifications.

All HEPA equipment to be used on the project must be delivered to the site empty of all debris, clean, free of dust, and in full operating condition. All HEPA equipment to be used shall be DOP tested onsite by a third party at the start of the project before being used on the project. This DOP certification must be verified by Owner's CAC prior to its use.

DOP certification testing shall be observed and witnessed by an Owner's CAC. Copies of DOP test results and certification must be submitted to Owner's CAC within 24 hours of the testing being performed.

No product or material will be used on the project unless the product data sheets and all SDS's have been submitted, reviewed, and approved by the Owner for use. Any product or material found on the project which has a product data sheet and/or SDS available and has not been approved will be removed from the site by the Contractor until review and approval has been completed by the Owner.

Part 7.2 - Rental Equipment and Supplies

Any equipment rented and delivered to the site for the purpose of conducts asbestos abatement work must be accompanied with documentation verifying that the rental agency has been notified, and acknowledges receipt of notification that the equipment being rented will be used for asbestos abatement work. This documentation must be submitted to the Owner's CAC prior to the equipment being delivered to the job site. Rental equipment, including scaffolding, will be held to the same standard of cleanliness as all other equipment on this project.

All rented equipment must be inspected and accepted by Owner's CAC as it arrives onsite. Any equipment covered with dust (no matter the source of dust), plaster debris, multiple layers of encapsulant and/or spray glue, or any other debris will not be accepted. Delays caused by a lack of clean equipment will not extend Contractor's schedule. Equipment rejected due to a lack of cleanliness must be removed from Owner's grounds in order to be cleaned. Dirty equipment wrapped in plastic will not be acceptable.

The Owners' agent/site representative must be informed 24 hours prior to the delivery of any rental equipment.

The decision of the Owner or its representative on all rental equipment and supplies shall be final.

SECTION 8. WORK SITE FACILITIES

The Owner shall provide sanitary facilities for abatement personnel outside of the enclosed work area. To use these facilities all workers shall wear street clothes, not bathing suits or disposable coverall while using the facilities.

The Owner shall provide water for construction purposes. Contractor shall connect to existing Owner system.

The Owner shall provide the electrical source.

The Owner or its representative shall specify the waste water discharge location and location of waste containers.

The Owner shall specify on-site parking areas, if available, and access to the site.

SECTION 9. RESPIRATORY PROTECTION

All respiratory protection shall be provided to workers in accordance with the submitted written respiratory protection program, which includes all items as required by OSHA. This program shall be posted in the clean room of the worker decontamination enclosure system or adjacent to the clean room.

The Contractor shall ensure that all workers entering the regulated area wear appropriate respiratory protection. Respiratory protection provided workers shall be in accordance with 8 CCR 1529, and 8 CCR 5144 and the respiratory protection program submitted by the Contractor. This program shall be available at the project site.

The Owner or their representative may deny access to a regulated area to anyone who, in the final judgement of the Owner or their representative, is not properly wearing adequate respiratory protection for the project conditions. This includes but is not limited to those wearing unidentified respirators, those with improperly sealed respirators, those wearing respirators in an improper manner such as over their protective suit hood, or in any other fashion judged by the Owner or their representative to be improper or inadequate to protect the individual from the airborne asbestos at the project site.

The Contractor shall provide each worker needing respiratory protection with his or her own, individually identified, NIOSH-approved respirator. At a minimum, these respirators will be equipped with a P-100 series HEPA filter. The Contractor shall provide additional filter types if that becomes necessary for specific hazards discovered on the job site or if required in the contract documents.

The Contractor shall ensure that all workers use the respirator in compliance with the manufacturer's instructions for proper use and care of that product.

Workers must perform positive and negative respirator seal checks each time a respirator is put on, provided the respirator design so permits.

The Contractor shall ensure that those workers wearing powered air purifying respirators test the air flow rate according to the frequency and methods specified by the manufacturer.

Workers shall be given, at least, a qualitative fit test in accordance with procedures detailed in the Cal/OSHA requirements for all respirators to be used on this abatement project. An appropriately administered quantitative fit test may be substituted for the qualitative fit test.

The Contractor shall ensure and provide written records to the Owner’s CAC that all workers wearing tight-fitting respirators have been appropriately fit tested in accordance with the requirements of 8 CCR 5144.

The Contractor shall ensure that nothing interferes with the seal of the respirator to the face of the worker. This includes but is not limited to facial hair, clothing, protective clothing, equipment or anything else that comes between the respirator and the face of the worker.

Use of any respirator must be in compliance with the manufacturer's instructions for proper use and care of that product.

The Contractor shall ensure that workers wear respirators underneath protective clothing.

Workers conducts any work that may create an airborne release of asbestos must wear appropriate respiratory protection. This includes, but is not limited to the pre-cleaning of asbestos contamination off of furniture, equipment and floors, and the set-up of contaminated work areas.

The judgement of the Owner's CAC shall be final if there is a disagreement between the Owner and the Contractor regarding the need for wearing or the type of personal protection required..

In no event will a negative exposure assessment be allowed to lower respiratory protection, from that listed in the Scope of Work or required by regulation in the absence of an NEA, prior to the start of a project. Air samples used for negative exposure assessments created after the project has started must be from work conducted under this contract.

Minimum Respiratory Protection for OSHA Class I Work
All Class I asbestos work will require tight-fitting, full-face powered-air purifying respirators pursuant to Title 8 1529.

Unless stated otherwise in the contract documents, for the purposes of respiratory protection, Class I work will include the removal of materials such as gypsum board surfaces that are covered with a texturing or skim coat material that contains >1% asbestos.

Minimum Respiratory Protection for Class II and III Work Practices
Unless specified differently in the contract documents, the Contractor's employees conducts Class II or III work will wear a minimum of half-face air-purifying respirators. Contract documents may require additional respiratory protection, such as the use of full face air-purifying respirators or powered air purifying respirators.

After work has begun, if a Contractor wishes to lower respiratory protection requirements, he or she must demonstrate to the Owner's CAC that personal air sampling results from that project prove that airborne fibers levels are below the limit of quantification for the phase contrast microscopy method. The Owner's CAC will normally require sampling results used for this purpose to include several days of sampling taken during the work expected to generate the highest expected airborne levels. The Owner's CAC will have final authority regarding whether or not the respiratory protection may be reduced or eliminated. For example, the Owner's CAC may require personal samples be analyzed by TEM before determining that asbestos does not pose an airborne health risk.

All Class I work shall require full-face powered air purifying respirators and are not subject to a reduced level of respiratory protection regardless of the air sample results.

The Owner's CAC has full authority to raise the level of respiratory protection required for access to the regulated area if in his or her judgement additional respiratory protection is required. For example, if personal air sample results collected by either the Contractor or Owner's CAC indicate higher than expected levels, the Owner's CAC is authorized to increase the level of required respiratory protection. The Owner's CAC will determine if the increased respiratory protection is due to new, unexpected developments such as the discovery of new materials, or if the increase is due to the Contractor failing to follow good work practices. The judgement on this matter by the Owner's CAC will be final.

The Owner is not responsible for increased costs or delays resulting from the need to increase respiratory protection should the reason for the increased respiratory protection be due to the Contractor's failure to adequately utilize good engineering controls and work practices and/or the prompt cleanup of debris.

The Contractor may only implement respiratory protection changes after receiving written approval for the change from the Owner's CAC.

Powered-air purifying respirators must be worn if waste containers spill, break, or in any other fashion require a Class I work cleanup be performed.

The Contractor shall comply with the respiratory protection requirements in 8 CCR 5144 includes assigned protection factors for all respirators. The following list of respirators and their assigned "protection factors" shall be the criteria for the selection of respiratory protection.

Respirator Selection	Protection Factor
Half-face or full-face air purifying respirator equipped with HEPA filter.	10
Full-face air purifying respirator equipped with HEPA filter with quantitative fit test.	50
Full-face Type C continuous flow supplied air.	1000
Full-face, powered air purifying respirator equipped with HEPA filter.	1000
Full-face supplied air respirator operated in pressure demand mode.	1000
Full-face supplied air respirator operated in pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus.	1000

Workers shall be provided respirators equipped with HEPA filters approved by NIOSH to be worn in the designated work area and/or whenever a potential exposure to asbestos exists. Owner or its representative may refuse entry to the work area to a worker with inappropriate respiratory protection.

Sufficient filters shall be provided for replacement as required by the workers or applicable regulations. Disposable respirators shall not be used.

SECTION 10. PERSONNEL PROTECTION REQUIREMENT AND TRAINING

Prior to commencement of abatement activities all personnel who will be required to enter the work area or handle containerized asbestos containing materials must have received adequate training in accordance with the OSHA, EPA AHERA, EPA NESHAP and DTSC regulations.

All personnel performing asbestos related work shall possess a current accreditation certificate as an asbestos worker or contractor/supervisor as described in 40 CFR Part 763, Appendix C to subpart E, Asbestos Model Accreditation Plan.

Special on-site training on equipment and procedures unique to this job site shall be performed by the Contractor as required or recommended by the equipment manufacturer.

The Contractor shall provide training in emergency response and evacuation procedures.

Disposable clothing, including head, foot and full body protection, shall be provided in sufficient quantities and adequate sizes for all workers and authorized visitors. Damaged coveralls shall be immediately repaired or replaced.

Hard hats, protective eye-wear, safety shoes, proper protective gloves, rubber boots and/or other footwear shall be provided by the Contractor as required for workers and authorized visitors.

Contractor personnel shall not wear street clothes or clothes of any type underneath the protective disposable clothing during any Class I work where showering is required. Upon exiting the work area, no items worn in the work area, such as clothing, personal protective gear, footwear, or hair coverings will be allowed to be worn past the shower of the decontamination unit. Contractor workers have the option of wearing disposable undergarments or a bathing suit underneath protective disposable clothing.

Each time the worker(s) enter the work area they will don new disposable clothing. Street clothes, including but not limited to, underwear and street shoes shall not be allowed inside the work area, except during visual clearance activities.

The Owner's CAC may use personal judgement to allow authorized personal to wear street clothes under protective clothing during the construction of final visual or other short-duration visits into the regulated area during times which asbestos is not being disturbed and gross debris is not present.

SECTION 11. WORKER DECONTAMINATION ENCLOSURE SYSTEMS

Not Applicable

SECTION 12. WORKPLACE ENTRY AND EXIT PROCEDURES

Not Applicable

SECTION 13. DIFFERENTIAL AIR PRESSURE SYSTEMS

Part 13.1 - Negative Pressure Requirements

Not Applicable

Part 13.2 - DOP Testing

All HEPA filtered systems used on this project shall be tested and certified by an independent third party company on-site prior to use. Contractors may not test their own equipment. All vacuums and pressure differential units shall meet ANSI Z9.2, using an appropriate testing agent. Written copies or electronic copies of documentation of these tests shall be provided to the Owner's CAC prior to the use of any HEPA system.

DOP, or equivalent, testing shall be conducted on-site, unless stated otherwise in the Scope of Work. All HEPA filtered units, including but not limited to, vacuums and air pressure differential units (negative air units) shall be tested onsite.

All HEPA equipped equipment to be used on the project must be delivered to the site empty of all debris, clean and free of dust, and in full operating condition. Covering dirty units with poly, other than the HEPA filter surface, will not be acceptable.

Part 13.3 - Differential Pressure Recording Requirements

Not Applicable

Part 13.4 - Differential Pressure System

Not Applicable

SECTION 14. EXECUTION, WORK SCHEDULE

Part 14.1 - Execution

Owner Responsibilities

The Owner shall provide the Contractor with access to the building during scheduled work hours through their representative. This representative is expected to be the General Contractor in charge of the site. The Owner shall also be responsible for arming and disarming alarm systems on buildings where work will be performed.

The Owner shall also provide the Contractor access to water and electrical hook-ups.

Contractor Responsibilities

The Contractor is responsible for all connections, electrical cords, GFCI's, water hoses, and hose bibs necessary for attachment. GFCI's are required to be used by the Contractor on all electrical circuits in use.

The Contractor and Owner's CAC shall investigate the work area and agree (in writing if necessary) on the pre-abatement condition of the work area.

The Contractor shall post danger signs meeting the OSHA specifications at locations and approaches to locations where airborne concentrations of asbestos may exceed ambient background levels including all doors sealed as a critical barrier and at all entries to asbestos work containments.

Part 14.2 - Power Outage Procedures

Not Applicable

Part 14.3 - Work Schedule

Contractor shall schedule work as required to meet the needs of the project. During progress of work, it shall be the Contractor's responsibility to inform the Owner's CAC 48 hours or earlier of any and all work shifts to be performed. If at least 48 hours notice is not given, the proposed work shift may be canceled by the Owner's CAC.

Contractor shall be responsible for informing the Owner's CAC in writing at least 48 hours or earlier prior to the proposed addition of any off hours work, work expected to include more than one shift per day, or extend beyond 10 hours in a shift. If 48 hours notice is not given, work shift may be canceled by the Owner's CAC. The Owner's CAC reserves the right to deny any changes in the work schedule.

If the Contractor wishes to work on a Federal or State holiday, more than five days a week, or more than 9 hours a day, Contractor becomes responsible for cost of project management fees to cover extended hours. If the Contractor fails to appear on-site without notifying Owner's CAC at least 24 hours in advance of a scheduled work shift, the Contractor becomes responsible for all Owner's CAC travel fees, on-site time fees, and other associated project management fees for that day.

At no time shall a work shift extend beyond 12 hours in a day.

SECTION 15. REMOVAL PROCEDURES

Wet all asbestos-containing material with an amended water solution using equipment capable of providing a fine spray mist, in order to reduce airborne-fiber concentrations when the material is disturbed. Saturate the material to the substrate; however, do not allow excessive water to accumulate in the work area. Keep all removed material wet enough to prevent fiber release until it can be containerized for disposal. Maintain high humidity in the work area by misting or spraying to assist in fiber settling and reduce airborne concentrations. Wetting procedures are not equally effective on all types of asbestos-containing materials but shall be used in all cases.

Saturated asbestos-containing material shall be removed in manageable sections. Removed material should be containerized immediately. Surrounding areas shall be periodically sprayed and maintained in a wet condition until visible material is cleaned up. Gross debris shall be cleaned up and bagged prior to end of each shift.

Material removed from building structures or components shall not be dropped or thrown to the floor. Material should be removed as intact sections or components whenever possible and carefully lowered to the floor.

SECTION 16. WASTE CONTAINER PASS-OUT PROCEDURES

Not Applicable

SECTION 17. CLEAN-UP PROCEDURE

Part 17.1 - Clean-up Procedure

Remove and containerize all visible accumulations of asbestos-containing material and asbestos-contaminated debris

Part 17.2 - Visual Clearance Criteria

The **Contractor** shall perform a pre-final visual inspection of the regulated work area and adjacent surfaces prior to requesting that the Owner's representative conduct a final visual inspection. The pre-final visual performed by the Contractor shall verify that all materials have been completely removed from the work area, and that the work area meets the requirements specified in Section 17.

In addition, the level of cleanliness in all work areas where asbestos has been removed shall meet the final clearance criteria established in the ASTM E1368-90 Standard Practice for Visual Inspection of Asbestos Abatement Projects.

Upon completion of the pre-final visual inspection by the Contractor a final visual of the containment area will be performed by the Owner's representative. The CAC will determine the clearance criteria for the project.

SECTION 18. CLEARANCE AIR MONITORING

Not Applicable

SECTION 19. MONITORING

Owner reserves the right to perform air and performance monitoring at any time.

Contractor shall provide personal air monitoring in accordance with Cal/OSHA regulations. Results shall be made available to the Owner's CAC within 72 hours of collection. Hard copies or electronic copies of these results shall be supplied to the Owner's CAC within 7 days of collection. Failure to supply these sample results in specified time may cause work to be stopped until all delinquent results have been submitted. Loss of Contractor work time because of non compliance with the provisions of this paragraph will not extend the date for work completion.

SECTION 20. DISPOSAL PROCEDURES

Part 20.1 - Disposal Procedures

Disposal bags shall be of 6 mil poly, pre-printed with labels as required by DOT, Cal/OSHA and the Department of Toxic Substance Control (DTSC) regulations.

Stick-on labels as per OSHA and DTSC requirements for disposal containers shall be provided. All containers shall be labeled in accordance with DOT, Cal/OSHA and the DTSC regulations that require a "Caution" label and a "Hazardous Waste" label with the generator's name, address, and Manifest Document number.

Disposal shall be at permitted waste facilities for the type of waste. Transport vehicles shall be marked with the sign prescribed by OSHA during loading and unloading to warn people of the presence of asbestos.

All dump receipts, trip tickets, waste manifests, Waste Shipment Record (WSR) and other documentation of disposal shall be delivered to the Owner, for its records. The manifest shall be signed by the Owner, the waste transporter, and the Disposal Site Operator as the responsibility for the material changes hands. If a second waste transporter is employed, his name, address, telephone number and signature should also appear on the form. The WSR, if used, shall be signed by the Owner or its agent and the disposal site operator.

Part 20.2 - Transportation to the Landfill

The contractor shall provide a weight receipt that identifies the net weight of the material being discarded.

Part 20.3 - Disposal at the Landfill

Upon reaching the landfill, trucks are to approach the dump location as closely as possible for unloading of the asbestos-containing waste.

Bags, drums and components shall be inspected as they are off-loaded at the disposal site. Material in damaged containers shall be re-packed in empty drums or bags as necessary. Local requirements may not allow the disposal of asbestos waste in drums. Check with appropriate agency and institute appropriate alternative procedures.

Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out of the trucks.

Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposable head, body and foot protection and, at a minimum, half-face, air-purifying, dual cartridge respirators equipped with high-efficiency filters.

Following the removal of all containerized waste, the truck cargo area shall be decontaminated using HEPA vacuums and/or wet methods to meet the no visible residue criteria. Poly sheeting shall be removed and discarded, along with contaminated cleaning materials and protective clothing, in bags or drums at the

disposal site.

SECTION 21. PATENTS AND PREVAILING WAGES

Part 21.1 - Patents

Contractor shall pay all royalties and license fees required for the performance of the work. Contractor shall defend suits or claims resulting from Contractor's or any Sub-contractor's infringement of patent rights and shall indemnify Owner and Owner's representative from losses on account thereof.

Part 21.2 - Prevailing Wage Requirements

The asbestos abatement contractor is fully and totally responsible at all times for compliance with payment of prevailing wage rates pursuant to provisions of the California Labor Code, for compliance with Division 2, Part 7, Chapter 1, California Labor Code, including but not limited to Section 1776; and for compliance with California Labor Code, Section 1777.5 for all apprentice able occupations.

SECTION 22. PERMITS AND FEES

If any permits are required to be issued for any of the Work to be performed by Contractor, Sub-contractor(s) or Sub-subcontractor(s) as part of the Project, it shall be the sole responsibility of the Contractor to expeditiously obtain all such permits and any costs incurred by the Contractor in obtaining such Permits shall be included within the Contract Price.

SECTION 23. SPECIFIC PROCEDURES AND REQUIREMENTS

NOTE: All Specific Procedures and Requirements listed in Section 23 shall be reviewed by the Contractor along with the Scope of Work issued for the project. If any perceived conflicts are present between the Scope of Work and these specifications or within the General Requirements specification itself, the Contractor shall ask for a written interpretation from the Owner's CAC prior to submission of his bid. If conflicts in the "Scope of Work" and this specification or with the General Requirements specification itself are discovered after the start of abatement, the more stringent specification and/or requirements will be enforced. The Owner's CAC shall make the determination as to what which requirements and/or specifications are more stringent.

Part 23.1 - General Repair of Damaged Thermal System Insulation (TSI)

Not Applicable

Part 23.2 - Glove Bag Technique Requirements

Not Applicable

Part 23.3 - Mini-Cube Enclosure Requirements

Not Applicable

Part 23.4 - Roofing Abatement Requirements

General Requirements

1. Except as amended here and in Section 24, Asbestos Specification/ Procedures, in all other Sections of this Exhibit shall be followed.

2. The work shall be coordinated and scheduled when there are favorable weather conditions, such as, performing the abatement work when the forecast is for "clear skies" and no rain for three or more consecutive days. The Contractor shall remove only that amount of roofing material which can be re-roofed or covered, and secured from the weather.

   Work may be halted at the discretion of the Owner's CAC if wind conditions occur which can or does cause removed roofing materials to be blown off the roof area, or beyond the designated removal area perimeter. All roofing work shall be coordinated to allow other trades to work at the same time as long as their work is located in areas where contamination cannot occur. No cutting, sanding, grinding, or removal of any type will take place until all preparations for removal have been completed and inspected by the Owner's CAC. This section may be amended in other sections of this Specification for this project.

   The words "clear skies" are used as a means of indicating favorable weather conditions. These two words do not mean, nor are they intended to require skies be clear and free of clouds, fog, or other meteorological conditions which are not expected or forecast to produce measurable rain. The follow up requirement of no rain for three or more consecutive days is to help clarify the favorable weather condition requirement. The Contractor should not to be over optimistic and create more open roof areas than can be re-roofed, secured, or properly protected from weather in case the forecast changes unexpectedly or without warning.

3. All work hours at the site shall be determined by the Owner or as defined in other sections of this Specification.

4. All work shall be coordinated with the other trades involved on this project, with central coordination being primary between the abatement Contractor and the General Contractor for the project. However, Owner's CAC must be notified of projects in advance as stated in other sections of this Specification.

5. The Contractor shall provide all necessary equipment, tools, materials, lighting, labor, etc. to perform the work. Sufficient lighting shall be provided to illuminate the entire removal and transit areas for removal of roofing material, and for the final visual inspection by the Owner's CAC if the work is to be performed at night.

6. All HEPA equipment to be used on the project must be delivered to the site empty of all debris, clean, free of dust, and in full operating condition. HEPA equipment to be used inside any building must have been DOP tested within the last 90 days. This DOP certification must be verified by Owner's CAC prior to its use.

7. The Contractor shall provide worker safety according to all OSHA regulations (Title 8), including use of tie-offs, harnesses, and lanyards. Particular attention shall be given to the placement and securing of accesses (ladders, etc.) to the roof.

8. All ladders used shall conform to Cal/OSHA requirements. The ladders shall extend at least three feet above the roof line, and shall be tied off to the building to prevent them from sliding.

Contractor Responsibilities

1. The Contractor shall be responsible for securing all exposed roof surfaces, including any roof penetrations against weather after roofing materials have been removed. Protection of the roof must be made with an impermeable barrier to prevent water from entering the building structure.

2. The Contractor will be responsible for all clean-up and costs associated with the decontamination of occupied spaces in the event of contamination of an occupied space.

3. The Contractor is responsible for any contamination of the attic space above the existing ceilings inside the buildings caused by their work, except as noted specifically in Section 24, Asbestos Specification/Procedures.

4. The Contractor is responsible for damage to the roofing substrate, and will be responsible for repair or replacement if damaged.

5. The Contractor is responsible for removal of all roofing layers and associated materials such as roofing nails, insulation, fiberboard, etc. down to the wood or metal substrate regardless of asbestos content, unless otherwise noted in Section 24, Asbestos Specification/ Procedures. When it is unknown how many layers of roofing materials exist, it must be assumed that there are multiple roofing layers present. The Contractor may, upon request and approval by the Owner, collect core samples of any roof to be removed for the purpose of determining its depth and structure. If coring is conducted, it is the responsibility of the Contractor to repair to industry standards using non-asbestos materials the areas affected.

6. The Contractor is responsible for removing all roofing nails, and driving in all nails used for securing the roofing substrate after roof material has been removed. The Contractor will not be required to remove silver painted or tar coating on conduit, roof jacks, heating, ventilation, and air conditioning (HVAC) equipment, flashing, etc. which will be reused by the Owner. Where flashing is to be reused, the Contractor shall carefully remove and save the flashing in an undamaged condition, unless otherwise required by the Owner. This section may be amended in Section 24, Asbestos Specification/Procedures for this project.

7. The Contractor is responsible for removal and replacement of wood block or metal supports which may be present under conduit, gas lines, piping, HVAC units, ducts, etc. in order to perform the work. The Contractor is also responsible for temporarily installing wood blocks for any existing roof structures during the roofing removal, when it is necessary to remove existing support members to accomplish the work.

8. The Contractor is responsible for damage to all equipment and existing cables which are present on the roof. The Contractor is responsible for damage to electrical wiring, telephone lines, antenna wires, and other conduits which are present. An inspection for pre-existing conditions is the responsibility of the Contractor, but may also be conducted by Owner's CAC.

9. The Contractor is responsible for obtaining all necessary permits to perform this work, including any local permits for work in the evening/night hours.

10. Standards of cleanliness for fluted metal decks located underneath asbestos-containing roofing materials. It is possible for the abatement crew to remove the asbestos-containing roofing materials without breaking through or removing the underlying non-asbestos insulation material. If removal of top layer of asbestos roofing materials and leaving the non-asbestos materials in place is performed as described above, and the insulation material remains intact, Owner's CAC can conduct a final visual for asbestos-containing debris. Once this inspection has been completed, and the requirement for no remaining asbestos-containing debris on the roof is met, the insulation layer can be removed.

At this point, asbestos is no longer an issue, and Owner's CAC will allow minor amounts of the non-asbestos debris to remain in the fluted areas of the deck. General cleaning of the flutes is conducted to a point where the amount of debris remaining is reduced to a minimal amount without having to completely clean or vacuum the flute channel.

The Owner is unaware of any potential hazard which could be caused by leaving some non-asbestos debris, and does not consider it necessary to have the flute channels detailed beyond generally clean conditions. However, if the fiberboard layer is extensively damaged during removal of the asbestos-containing materials, and asbestos-containing roofing debris cannot be distinguished from non-asbestos containing roofing materials, all flutes shall be vacuumed and cleaned as set forth in the project specifications.

Owner Responsibilities

1. The Owner is responsible for closing all windows in the building where the asbestos roofing material will be removed. This must be done prior to the asbestos abatement contractor arriving onsite for the work shift, in order to prevent delays.

2. The Owner shall also be responsible for cutting or trimming back all trees, limbs and other vegetation which may impact the removal of the existing roofing materials.

3. It is assumed that the buildings associated with this project have roof decking which may include any number of construction methods which allow for roofing debris to sift into joist spaces, or attics located beneath areas where roofing may have previously been removed. Therefore, it must be assumed that all inaccessible and accessible attic spaces, joist spaces, and even flutes of metal decks involved with this project will become, or have already been contaminated with asbestos, and shall be noted.

4. The Owner acknowledges that the removal of any roofing materials during this project will result in contamination of the attic spaces, and assumes any associated responsibilities unless specified differently in the scope of work.

General Roof Removal Instructions and Requirements

1. Removal of non-friable asbestos-containing roofing is designated as Class II work. Half-face respirators and disposable coveralls shall be used at a minimum by all workers, at all times, when within the regulated area.

2. No personnel will be allowed into the regulated area during actual removal work without proper respiratory and personal protective equipment. Work boots with hard soles are required to be worn by all abatement personnel. No athletic, street, or dress shoes are to be worn during work activities.

3. All roofing material shall be removed in an intact state to the extent feasible.

4. All roofing is to be removed wet by an amended water solution or encapsulant as necessary.

5. The abated roof area shall be HEPA vacuumed after roofing materials have been removed. Particular attention shall be directed at the flute channels of metal decks.

Pre-Abatement Preparation Requirements

1. The Contractor shall seal all air intakes associated with the HVAC units which are on or near the roof under abatement, and at adjacent HVAC units, particularly downwind from roofing removal activity. In addition, all louvers, window mounted fan systems, attic openings, etc., shall be sealed as critical barriers. The Contractor is responsible for sealing all HVAC openings as critical barriers using one

layer of 6 mil poly. These critical barriers shall be installed at the beginning of each shift, and removed at the end of each shift prior to reuse by the Owner. If the building will not be reoccupied daily, the barriers may stay in place.

The perimeter of the roof where removal is to be conducted, shall be posted with barrier tape at a distance of at least 20 feet from the edge of the removal area. This barrier tape will provide a buffer zone, and assist in the restriction of non-abatement personnel.

Poly sheeting shall be placed on the ground directly below the work area or on the adjacent roof surfaces at least 10 feet. The Contractor shall secure the poly to the ground using tape, weights, or other means to secure the poly from being picked up by wind or becoming a trip hazard. The Contractor shall secure the poly to the adjacent building surfaces with tape, etc.

Waste containers and Waste container Preparations

1. The Contractor is responsible for inspecting all waste containers delivered to the job site for load worthiness. The Owner's CAC reserves the right to refuse any waste container without any additional cost to the client, which upon examination, and in the opinion of the site representative, has a high probability of failure of doors, skids, walls, floors, or which contains other debris.

2. The Contractor shall be required to place footing materials of sufficient thickness, strength, and size under the casters, footings, and/or runners of waste container(s) to prevent damage of property surfaces. The Contractor is responsible for all damages to Owner's property caused by the delivery, placement, or removal of a waste container. Damaged property shall be repaired to equal or better condition than was present prior to the activity causing the damage. This section may be amended in Section 24, Asbestos Specification/Procedures for this project.

3. Unless the roofing material is carried or passed to the ground by hand, it shall be lowered to the ground via covered, dust-tight chute, crane, or hoist. All waste shall be sufficiently wetted with amended water to prevent fiber release. If fiber release cannot be prevented, then the chute and bin must be within a negative pressure enclosure. In no case shall roofing materials be dropped or thrown into bins or waste containers from the roof.

Posting and Label Requirements for:

Regulated Area Entry Points and Waste container Perimeters

Access to regulated areas shall be posted as outlined by Cal/OSHA Title 8, 1529 (k)(7)(B) 1 and 2 with warning signs. Perimeters of waste container(s) shall also be posted as outlined by Cal/OSHA Title 8, 1529 (k)(7)(B) 1 and 2 with barrier tape bearing the following information:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA

These postings are required to warn non-abatement personnel of the restricted access, and potential hazard which exists in the vicinity of the regulated areas and waste container(s).

Building Perimeter at Ground Level

Building perimeters shall be posted with barrier tape bearing one of the following descriptions:

CAUTION in black letters on a solid yellow background.
DANGER in black letters on a solid red background.
DANGER ASBESTOS HAZARD in black letters on a solid red background.

Waste Material Containers

Waste material containers, including the "burrito wrapped" material, shall have warning labels affixed in accordance with Cal/OSHA Title 8, 1529 (k)(8)(A-D).

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

Waste Disposal and Documentation Requirements

1. Roofing waste may be disposed as non-hazardous asbestos waste, in a landfill permitted to accept non-friable, non-hazardous asbestos roofing material. If the asbestos roofing material is currently friable, or becomes friable during its removal, it shall be disposed of in a landfill permitted to accept friable asbestos waste.

   It is acceptable to dispose of bagged or sealed roofing waste into open topped waste containers lined with a single layer of 10 mil poly sheeting. The Contractor shall completely enclose all roofing waste material commonly known as "burrito wrap" in the waste container using 10 mil poly sheeting. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such a manner as to preclude the dispersion of dust. In addition to the 10 mil poly sheeting, the top of the waste container shall be completely enclosed with a tarp which is secured to the vehicle for transport or storage on-site if left overnight. The type of material for the tarp shall meet all requirements for transport of hazardous materials.

2. The Contractor is required to provide to Owner's CAC a copy of the "trip tickets" indicating the actual weight of waste material.

Visual Inspection Forms-Interior and Exterior (Roof Removal Shifts Only)

The Owner's CAC shall conduct visual inspections inside each building space prior to each work shift to determine existing conditions, including loose or dislodged acoustical ceiling tiles.

In addition, all interior spaces directly below the area of work shall be visually inspected by the Owner's CAC, at the end of the work shift, to inspect for roofing debris and for loose or dislodged ceiling tiles, etc.

The Contractor is responsible for all costs associated with clean-up of any debris which falls in the occupied spaces of the building.

The Contractor is responsible for providing adequate lighting during all phases of work. This includes final visual inspection by the Owner's CAC, of the removal area and adjacent surfaces impacted during the work.

The Contractor shall perform a pre-final visual of the removal area and adjacent surfaces prior to requesting that the Owner's CAC conduct a final visual inspection. The pre-final visual performed by the Contractor shall verify that all materials have been completely removed from the work area as specified, and all poly sheeting or tape placed over any vents or equipment which has been removed. The Contractor will also verify that all perimeter poly sheeting on adjacent surfaces has been picked up, and all debris generated by the roofing work such as gutters, flashing, roofing products, paper, nails, screw, etc. have been placed into the waste container.

Protection of Accessible Attic Areas

Any plumbers plenums which may be located below areas where roof removal will take place and the roof deck is not constructed of plywood or solid sheet metal, shall be protected with poly barriers prior to work being performed. Any and all debris which may get into a plumbers plenum will be the responsibility of the Contractor and must be cleaned up by the abatement contractor. A final visual inspection by Owner's CAC will be required prior to allowing the abatement contractor to move to the next designated removal location.

Caulking and Poly Barrier Requirements

Roof removal may cause dust and debris to enter attic areas through gaps between roof deck boards. This dust and debris could enter the interior building areas through gaps and penetrations in the ceilings. The Contractor shall caulk all identifiable gaps in the ceilings, excluding areas specified to be protected with poly barriers. Typically this will require caulking along curtain tracks, lowering lighting trim to caulk around junction boxes, and caulking gaps around the ceiling edges. The Contractor is responsible for all costs of decontamination and clearance sampling of interior areas if dust and debris fallout occurs.

All caulking work shall be performed using an Owner approved, paintable material which matches the existing color of the surface, and shall be applied to industry standards with a smooth finish. Caulking must be performed at least five days prior to roof removal work to allow Owner's CAC time to inspect the work completed.

Exterior corridor areas shall not require caulking, however, all grooves shall be thoroughly cleaned of debris by HEPA vacuuming immediately following roof removal. When construction of an overhang or covered walkway is such that prolonged fallout of roofing debris can be expected to occur, the Contractor shall install and maintain a poly barrier below the roof substrate until debris fallout has ceased.

Where exposed tongue and groove wood or roofing substrates are visible, which do not provide a solid barrier between the roof deck and the interior of a building exist, the Contractor may choose to install poly barriers in lieu of caulking. These poly barriers must be air tight and secured to the building surfaces. Spray glue shall not be used to attach any materials to any building surfaces unless approved by the Owner. These poly barriers shall remain in place for the duration of the roof removal and roof replacement activities. During the removal of the poly barriers, the Contractor shall carefully process all asbestos debris captured, either by wetting, HEPA vacuuming, or both, to prevent loss of debris and contamination of interior spaces. The Contractor is responsible for any damages to interior surfaces, and shall repair all finishes to the Owner's satisfaction.

Part 23.5 - Vinyl Floor Tile (VFT) & Associated Adhesive Abatement Requirements

Not Applicable

Part 23.6 - Carpet Removal over Vinyl Floor Tile (VFT)/Tile Adhesive Requirements

Not Applicable

Part 23.7 - Boiler Unit Removal Requirements

Not Applicable

Part 23.8 - Sheetrock and Joint Compound Abatement Requirements

Not Applicable

Part 23.9 - Impact to and Removal of Transite Pipe, Shingle, or Sheeting Materials

Not Applicable

Part 23.10- Demolition with Selected Asbestos Containing Materials Left in Place

Not Applicable

Part 23.11 - Contaminated Attic Space Procedures

Not Applicable

Part 23.12 - Non-Friable, Non-Hazardous, Glazing Abatement Requirements

General Requirements

1. Except as amended here and in Section 24, Asbestos Specification/ Procedures, in all other Sections of this Exhibit shall be followed.

2. Removal of non-friable, non-hazardous, asbestos-containing glazing materials shall be coordinated and scheduled to be performed when there are favorable weather conditions, such as, low winds and no rain. If possible the work should be conducted when the interior space adjacent to the removal area is unoccupied.

3. Work should be halted if wind conditions occur which can or does cause removed glazing materials to be blown off the perimeter poly sheeting, or beyond the designated removal area perimeter.

4. No cutting, sanding, grinding, or removal by any other method which will result in the glazing being crumbled, crushed, or turned in to powder is to be used without review and approval by the Owner and the Owner's Representative.

General Glazing Removal Instructions and Requirements

1. Removal of non-friable, asbestos-containing, glazing materials, is designated as Class II work. Half-face, negative pressure respirators and disposable coveralls shall be used at a minimum by all workers, at all times, when within the regulated area.

2. All glazing materials shall be removed in an intact state to the extent feasible utilizing hand tools such as a hammer and chisel, or other implement or tool suitable for this type of work. At no time may power tools be used while following these removal requirements.

3. All glazing materials are to be pre-wet with an amended water solution or liquid encapsulant prior to removal, and as needed during removal.

4. All associated surfaces where removal of glazing has taken place shall be wet wiped and HEPA vacuumed prior to removal of the regulated area or any interior poly sheeting/critical barrier. Particular attention shall be directed at assuring all loose debris has been cleaned from the removal surfaces.

5. Upon completion of all activities worker shall clean exposed skin with hot soap and water, and check clothing for any glazing chips. Remove chips by hand or utilize a HEPA filter equipped vacuum.

Pre-Abatement Preparation Requirements

1. The worker may either seal the interior window surface with poly sheeting to create a critical barrier,

or place one layer of 6 mill poly sheeting on the floor beneath the window incase a window pane is broken during removal. These critical barriers or floor coverings shall be installed prior to the initiation of the removal work, and removed upon completion of the removal work as appropriate.

2. If the interior space must remain occupied a critical barrier must be installed on the interior surface of the window or opening where removal must occur. This may be waived and a layer of sheeting may be placed on the floor or adjacent surfaces if the interior space is going to remain unoccupied during the entire removal operation.

3. The perimeter of the work area where glazing removal is to be conducted, shall be posted with barrier tape at a distance of at least 20 feet from the edge of the removal area. This barrier tape will provide a buffer zone, and assist in the restriction of non-removal personnel.

4. Poly sheeting shall be placed on the ground directly below the work area or on adjacent surfaces for a distance sufficient to contain all debris which may be generated during the work. The poly sheeting should be secured to the ground using tape, weights, or other means to assure the poly will remain in place and not be picked up by wind or become a trip hazard.

Posting and Label Requirements for:

Regulated Area

Access to regulated areas shall be posted as outlined by Cal/OSHA Title 8, 1529 (k)(7)(B) 1 and 2 with warning signs and barrier tape bearing the following information:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE
REQUIRED IN THIS AREA

These postings are required to warn non-abatement personnel of the restricted access, and potential hazard which exists in the vicinity of the regulated area.

Work Area Perimeter

Work area perimeters shall be posted with barrier tape bearing one of the following descriptions:

CAUTION in black letters on a solid yellow background.
DANGER in black letters on a solid red background.
DANGER ASBESTOS HAZARD in black letters on a solid red background.

Waste Material Containers

Waste material containers, shall have warning labels affixed in accordance with Cal/OSHA Title 8, 1529 (k)(8)(A-D).

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

Waste Disposal

1. Glazing waste may be disposed as non-hazardous asbestos waste, in a landfill permitted to accept non-friable, non-hazardous asbestos-containing material as long as the removal work was performed by hand utilizing hand tools, and the materials were not crushed, pulverized, or turned into powder during the removal process. If this does occur the waste must be reclassified as friable. If the asbestos-containing glazing material is currently friable, or becomes friable during its removal, it shall be disposed of in a landfill permitted to accept friable hazardous asbestos waste.

Part 23.13 - Subfloor Crawl Space Dirt Removal Requirements

Not Applicable

Part 23.14 - Subfloor Enclosure Requirements

Not Applicable

Part 23.15 - Installation of "Rat Slab" in Sublfoor Crawl Space Requirements

Not Applicable

Part 23.16 - Stucco/Texture Removal and Containment Requirements

Not Applicable

Part 23.17 - Fireproofing Abatement Requirements

Not Applicable

SECTION 24. ASBESTOS SPECIFICATIONS/PROCEDURES

Part 24.1 - Contacts

Blake Howes, Entek Consulting Group, Inc. 916-632-6800

Part 24.2 - Removal Locations

Refer to architectural drawings for this site identifying the buildings and work included in the project and scope of work outline. The General Contractor and his Sub-contractor are responsible for estimating the amount of asbestos-containing materials to be disturbed or removed as revealed on the mandatory bid walk, and provided in the project specifications and architectural drawings. The drawings will also provide the Contractor with locations where work is to be performed to allow computation of the quantities of materials to be impacted or removed.

The asbestos contractor shall provide a complete copy of this specification to their onsite competent person for reference while conducts work on the project. A copy of these specifications shall remain onsite by the asbestos contractor for the duration of the project.

Part 24.3 - Materials to be Abated

Refer to the architectural drawings and project specifications for designations and instructions pertaining to what materials are to be removed or impacted during this project. Directions pertaining to materials to be impacted or removed during this project are **NOT** included in this Exhibit. This exhibit includes work practices

and procedures for those materials that are impacted by the planned renovation/demolition.

Areas of roofs, walls, floors, and/or ceilings may require penetrations be made during the project which may involve asbestos containing materials (ACM) depending upon the location of penetrations. Prior to impacting any building materials which are listed as "suspect" for containing asbestos by the US EPA the Contractor should refer to Section 25, Asbestos Results List for information pertaining to specific Asbestos Containing Materials (ACM) or products known to exist on the site. Materials suspected of containing asbestos but which have not been tested are "assumed" to contain asbestos.

A hazardous materials inspection was conducted by Entek Consulting Group, Inc. for the Albert Einstein Re-Roof and Beautification. The contractor shall refer to the Hazardous Materials Survey report prepared on February 14, 2023, which includes all suspect building materials that were sampled and analyzed for asbestos and included an assessment for lead in paint and ceramic products.

Materials commonly excluded from being suspected for containing asbestos include but are not limited to: unwrapped pink and yellow fiberglass insulating materials or products, foam insulation, wood, metal, plastic, or glass. All other types of building materials or coatings on the materials listed above are commonly listed as "suspect" and must be tested prior to impact by a Contractor.

Attic spaces at this site may already be contaminated with asbestos roofing debris from prior roofing replacement projects, but is unknown. If ceiling systems are removed and it is discovered that suspect roofing debris is present, the contractor shall stop work and bring it to the attention of the project manager to assess the potential for asbestos.

Part 24.4 - Containment and Abatement Requirements

The general guidelines in these specifications shall be followed by the asbestos abatement contractor for all work on this project. All requirements of Cal/OSHA Section 1529 and US EPA AHERA regulations apply, and shall be followed, as well as, other applicable regulations.

The Contractor shall follow all requirements set forth in Section 23, Specific Procedures and Requirements when disturbing or removing specific asbestos containing materials.

Part 24.5 - Contractor Assist Requirements

Not Applicable

Part 24.6 - Worker Protection

At a minimum half-face respirators with P-100 (HEPA) cartridges, disposable coveralls, and hard sole shoes shall be used during the removal and disposal of all asbestos containing material. Full-face powered air purifying respirators (PAPR) with P-100 cartridges are required for all Class I work. Workers wearing tennis shoes, sandals, or soft sole type shoes will not be allowed to work on roofs or inside containments regardless of the activity being performed. Worker protection for all other work areas shall be in compliance with Cal/OSHA requirements and shall follow the respirator selection as specified in Title 8 section 5144.

Part 24.7 - Electrical and Water Hook-Ups

The Owner shall provide access for electrical and water hook-ups. The Contractor shall install a temporary electrical spider box to an existing electrical panel using a licensed qualified electrical contractor. The Contractor is responsible for all hook-ups, electrical cords, water hoses, and hose bibs necessary for attachment.

Part 24.8 - Visual and Air Clearance Criteria

The Contractor shall perform a pre-final visual of the removal area and adjacent surfaces prior to requesting that Owner's asbestos consultant (CAC) conduct a final visual inspection. The pre-final visual performed by the Contractor shall verify that all materials have been completely removed from the work area, and that the work area meets the requirements specified in Section 17.

Upon completion of the pre-final visual inspection by the Contractor, a final visual of the containment area will be performed by Owner's asbestos consultant.

Part 24.9 - Owner's Responsibility

Not Used

Part 24.10 - Disposal Requirements

All non-friable non-hazardous asbestos waste shall be tracked using a Bill of Lading or equivalent and signed by an authorized Owner's representative. No individual or representative other than the Owner's designated representative is permitted to sign Bill of Lading or equivalent for the Owner unless otherwise indicted.

Part 24.11 - Work Periods

Work periods shall be scheduled with Owner's CAC at least 48 hours prior to the start of any shift. If weekend work is to be conducted, shift times are to be established and approved by Owner's CAC. All shifts are to consist of 8 hours and will begin at the time specified and agreed to by Owner's CAC and the abatement contractor.

PREPARED BY:

Blake Howes
Vice President
Entek Consulting Group, Inc.
CAC#13-5015
February 16, 2023

Part 24.12 - Pre-Construction Submittal List

1. _____ Copy of State of California - Contractor's State License

2. _____ Copy of State of California CSLB Active License

3. _____ Copy of State of California CSLB Asbestos Certification

4. _____ Copy of Department of Industrial Relations; Division of Occupational Safety and Health; Certificate of Registration for Asbestos-related Work

5. _____ Copy of signed statement from company officer listing citations and pending proceedings against the Contractor, or if there have been no citations, a copy of the statement that no actions by regulatory agencies have occurred in the last three years signed by an officer of the company.

6. _____ General Liability Insurance Certificate

   a) ___ Occurrence
   b) ___ Asbestos/Lead Activities or Abatement Certificate
   c) ___ Owner Named as Additional Insured
   d) ___ Consultant Named as Additional Insured

7. _____ Auto Insurance

8. _____ Workers' Compensation Insurance

9. _____ Statement of Non-use of Sub-contractors or

   a) ___ Name of Each Sub-contractor
   b) ___ License Number for Each Sub-contractor
   c) ___ General Liability Insurance Certificate for Each Sub-contractor

      1) ___ Minimum Coverage of $1,000,000.00
      2) ___ Owner Named as Additional Insured
      3) ___ Consultant Named as Additional Insured

   d) ___ Auto Insurance Certificate for Each Sub-contractor
   e) ___ Workers' Compensation Insurance Certificate for Each Sub-contractor

      1) ___ Owner Named as Additional Insured
      2) ___ Consultant Named as Additional Insured

10. _____ Written Notification to CAL/OSHA

11. N/A Written Notification to local SMAQMD, EPA NESHAP Region IX

12. _____ Copies of City Permits (e.g. Parking or Waste container) or Statement That no Permits are Required

13. _____ Statement That no Equipment Will be Rented for use With Asbestos or a Statement From Each Rental Company Acknowledging Their Equipment Will be Exposed to Asbestos

14. _____ Non-Emergency Telephone Numbers

    a) ___ Local Police Department
    b) ___ Sheriff Department
    c) ___ Fire Department
    d) ___ Emergency Medical Facility and Directions to That Facility From the Site

15. _____ Written Emergency Plans

16. _____ Written Work Plan

17. _____ Written Schedule

18. _____ Worker Documentation (Must Include at Least One Supervisor)

    a) ___ Training Records for Asbestos - AHERA (Supervisor and Worker)*
    b) ___ Medical Examination Written Opinion Final Report for Each Employee*
    c) ___ Respiratory Fit Tests for Each Employee*

19. N/A Equipment list, SDS for all materials to be used on the project, including but not limited to, spray glue, encapsulants, wetting agents, mastic remover, etc.

20. _____ Name of laboratory/person used for PCM analysis and copy of current NVLAP Certificate of Accreditation (if applicable), and most recent AIHA Proficiency Analytical Testing (PAT) Program results.

21. _____ Written Statement That OSHA Monitoring Will be Performed During the Project

22. N/A Manufacturers documentation of 5.0 micron filter capability required for waste water

23. N/A Name of Transporter

24. N/A Hazardous Waste Transporter Registration (if applicable) **Is required only if work to be conducted involves the removal and disposal of "hazardous" asbestos waste as determined either by definition or designated within the Asbestos Abatement Specifications/Procedures and associated attached Exhibits.**

25. _____ Waste Facility Documentation

    a) ___ Name and Site Address
    b) ___ EPA Identification Number (if applicable)
    c) ___ Copy of Current Permit Authorizing Asbestos Waste Receipt and Disposal

26. _____ Signed Copy of Competent Person Form Acknowledging Reading and Understanding the Specifications (Last Page of Forms Sections of Document) This must be signed by the asbestos Contractor/Supervisor who will onsite, not in the contractor's office.

Note: Items 9, 12, 13, and 21 may be addressed in a single letter as applicable.

* No Contractor's worker will be allowed to conduct asbestos related work, enter a containment, or regulated area prior to verification of AHERA, respirator, and medical documentation. This verification must either be onsite or faxed to Owner's CAC prior to entry.

Part 24.13 - Interim Construction Submittals

Not Applicable

Part 24.14 - Post Construction Submittal List

Contractor shall provide the following post-construction submittals to Owner's Representative within thirty (30) days of the completion of asbestos abatement work.

1. _____ Copies of revised notifications to regulatory agencies.

2. _____ Information on all new workers not covered by the pre-construction submittals and not submitted during the project.

3. _____ A copy of worker exposure monitoring results collected in compliance with DOSH regulations (Title 8 CCR, Section 1529) including daily/representative/full-shift/breathing-zone air samples, and 30-minute excursion samples.

4. N/A A copy of the worker/visitor log showing the following for all persons entering the work area: date, name, social security number, entering, and leaving times, company or agency represented, and reason for entry. The Contractor's time records will not be accepted in lieu of a worker/visitor log.

5. _____ Copies of all accident reports submitted during the course of work. **If no accidents occur during the project this should be stated in writing by the Contractor.**

6. _____ Receipts from the landfill operator acknowledging the Contractor's delivery of wastes, including dates, container types and quantities, tare weights or material delivered, and all appropriate signatures.

7. _____ A complete record of the air filtration devices used certifying DOP testing (if performed) and a circular chart recording, indicating continuous operation and documenting differential air pressure.

8. _____ Copies of DOP Testing Performed on HEPA Equipment not Previously Submitted

9. N/A Manometer graphs identifying project name, date, and location.

10. N/A A copy of the asbestos waste record showing dates, times, manifest numbers, quantities of wastes, types of containers removed from the work area, the hauler, and the signature of the recorder.

11. N/A A Land Disposal Restrictions Notification and Certification

12. N/A Completed Uniform Hazardous Waste forms

13. _____ Other Documents as Requested

SECTION 25. ASBESTOS RESULTS LIST

Any material not specified on the following list which the Contractor encounters at this site must be considered as "suspect" and "assumed" to contain asbestos per US EPA. The only items excluded from this statement are; bare wood, glass, and metal.

Suspect Materials Found or Assumed TO Contain Asbestos					
Sample ID#'s	**Suspect Material**	**Asbestos Content/Type (%) by PLM**	**Location**	**NESHAP Classification**	**Total Estimated Quantity**
02A	Roof Jack/Curb & Penetration Mastic	**1-2% CHRYSOTILE**	Northeast Classroom Building (Estimated 20 Jacks Throughout Area)	CAT-I	80 Sq.
14A-G	Window Glazing Putty	**<1% CHRYSOTILE** (Confirmed by 400 Point Count Analysis)	Throughout Campus	Cal/OSHA ACCM	Unknown

Suspect Materials Found NOT TO Contain Asbestos or Considered Non-Suspect				
Sample ID#'s	**Suspect Material**	**EPA AHERA "Suspected" ACBM**	**Asbestos Content**	**Location**
01A-B	Composition Asphalt Rolled Roofing, Gray Roofing	Miscellaneous	NONE DETECTED	Northeast Classroom Building Roof
02B-E	Roof Jack/Curb & Penetration Mastic	Miscellaneous	NONE DETECTED	Throughout Campus Roofs EXCEPT Northeast Classroom Building Roof
03A-C	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	South 2 Story Building Roof
04A-C	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	Southwest 1 Story Classroom Building Roof
05A	Roof Patch Mastic with Silver Paint	Miscellaneous	NONE DETECTED	South 2 Story Building at 1st Floor Roof Perimeter
06A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	Southeast Round Building Roof
07A-D	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	Covered Walkway Roofs Throughout Campus

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Suspect Materials Found NOT TO Contain Asbestos or Considered Non-Suspect				
Sample ID#'s	**Suspect Material**	**EPA AHERA "Suspected" ACBM**	**Asbestos Content**	**Location**
08A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	East Cafeteria Upper Roof
09A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	East Cafeteria Kitchen Lower Roof
10A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	West Classroom Buildings North Roof
11A-B	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	West Classroom Buildings South Roof
12A	Composition Asphalt Rolled Roofing, Gray Roofing, Gray Drywall	Miscellaneous	NONE DETECTED	West Classroom Buildings, West Connector Hallway Roof
13A	Composition Asphalt/ Rubberized Rolled Roofing Patch	Miscellaneous	NONE DETECTED	West Classroom Buildings, East Covered Walkway Area Roof

Note 1.: **Category I Non-friable ACM** is asbestos-containing packing, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos by area.

Note 2.: **Category II Non-friable ACM** is any material, excluding Category I non-friable ACM, containing more than one percent asbestos, which is non-friable such as transite and other concrete based products.

Note 3.: **Regulated Asbestos-Containing Material (RACM)** is any friable material, any Category I non-friable ACM which has become friable, any Category I non-friable ACM which will be or has been subjected to sanding, grinding, cutting, or abrading, any Class II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to a powder by the forces expected to act on the material in the course of demolition or renovation operations.

Note 4.: **Asbestos Containing Construction Materials (ACCM)** is a manufactured construction material containing greater than 0.1% asbestos by weight by the PLM method.

Note 5.: The terms "assume" and "presume" mean the named material is considered positive for containing asbestos and must be treated accordingly, until properly sampled in compliance with 40 CFR, Part 763 Asbestos-Containing Materials in Schools; Final Rule and Notice.

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SECTION 26. SITE MAP

SECTION 27. FORMS

Competent Person Acknowledgement

The Cal/OSHA standard for asbestos related construction work, found in 8 CCR, 1529, outlines specific duties and qualifications of the "Competent Person." Find below a overview of these qualifications and responsibilities. The competent person must be authorized by their employer to take prompt corrective measures to eliminate hazards on the job and protect their workers safety. The competent person must be the Supervisor onsite who is capable of:

- Identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees.
- Identifying existing asbestos hazards in the work place and selecting the appropriate control strategy for asbestos exposure.

The duties of the competent persons include, but are not limited to:

- Frequent and regular inspections of the job site, materials, and equipment.
- Supervise or perform the set-up of the regulated area and/or containment.
- Ensure the integrity of the regulated area and/or containment.
- Set up procedures to control entry to and exit from the regulated area and/or containment.
- Supervise all employee exposure monitoring and assure it is conducted according to regulatory requirements.
- Ensure that employees working within the regulated area(s) wear respirators and protective clothing as required by regulation.
- Ensure that employees working set up, use, and remove engineering controls, use work practices and personal protective equipment in compliance with the regulations.
- Ensure that employees use hygiene facilities and observe the decontamination procedures specified in the regulation.
- Ensure through continuing onsite surveillance that engineering controls are functioning properly and employees are using proper work practices.
- Ensure that notification requirements of the regulation are met.

Additionally, the EPA requires the competent person to be trained in the Federal NESHAP regulations, the means to comply with them, and be on site during all removal operations.

I _____ have the authority to take prompt corrective measures to eliminate hazards on the job and protect workers safety. Furthermore, I have read and understand my duties as outlined above and under the applicable regulations, and will exercise them to best of my ability.

_____ Date: _____ Employer: _____
Signature of Competent Person Who Will Be Onsite

_____
Printed Name of Competent Person Who Will Be Onsite

REQUIREMENTS FOR DISTURBANCE OF LEAD IN CONSTRUCTION FOR PAINTING PROJECTS TABLE OF CONTENTS

REQUIREMENTS FOR DISTURBANCE OF LEAD IN CONSTRUCTION FOR PAINTING PROJECTS TABLE OF CONTENTS

ALBERT EINSTEIN MIDDLE SCHOOL RE-ROOF & BEAUTIFICATION EXHIBIT B

REQUIREMENTS FOR THE DISTURBANCE OF LEAD IN CONSTRUCTION

PART 1.0 GENERAL REQUIREMENTS

1.1 Introduction

These specifications are designed to minimize and control potential lead hazards during the disturbance of materials that contain lead. These procedures and precautions apply to the disturbance of lead that may result from the preparation of surfaces prior to painting, from the drilling into, cutting into, or removal of building components containing or covered with lead.

The primary focus of these specifications is to address the work practices and procedures that the Contractor and/or other subcontractors must follow when conducting activities that may disturb lead in paint or other coatings.

A lead in paint inspection was conducted by Entek Consulting Group, Inc. for the Albert Einstein Re-roof and Beautification Project and a report was prepared on February 14, 2023. Limited testing was conducted at the site to determine concentrations of lead on building surfaces. Attached are the results of the testing of paint chips of the project area in Part 5.0 Results of Lead Testing.

All exterior painted, stained or varnished building surfaces are assumed to contain various concentrations of lead unless otherwise indicated by laboratory analysis. The Contractor or other subcontractors may also encounter other building products such as lead sheeting, roof flashing or roof vents that may, in his or her judgement, be assumed to contain lead until proven otherwise.

The Contractor and other subcontractors disturbing lead must be familiar with the Cal/OSHA Title 8 1532.1 Lead in Construction requirements, which apply to this project. In addition, if the project includes disturbance of lead-based paint in homes, child care facilities or pre-schools building before 1978 where children under the age of six attend or live, the contractor shall follow the requirements of the US EPA 40 CFR Part 745 Lead-Based Paint (LBP) Renovation, Repair and Painting Program (RRPP).

In summary, the Contractor and subcontractors shall utilize engineering controls to limit the release of lead dust or debris. These engineering controls may include, but are not limited to, using wet methods, using tools with vacuum recovery systems with High Efficiency Air Particulate (HEPA) filtration, using vacuums with HEPA filtration, using negative air pressure differential systems, and by the prompt clean up of any lead-containing debris that the work might produce. Dry scraping, sanding, grinding, or abrading lead-containing materials is not permitted. All work that disturbs lead will require a containment. The containment may be as simple as plastic sheeting on the floor or ground when drilling minor penetrations or scraping paint on exterior surfaces. The requirements for work practices and containment are described in Part 3.5 Work Site Preparation & Containment Requirements.

The requirements of this specification apply to all employers who have employees who may reasonably be exposed to lead on this project. The painting contractor shall have trained workers and supervisors in accordance with the Cal/OSHA Lead in Construction regulations. In addition, this specification applies to all subcontractors conducting work on this project who have employees who may disturb lead by drilling, cutting, scraping, or demolishing materials containing lead.

No Contractor shall begin work which will disturb known or suspect lead-containing surfaces or materials in a manner that may expose a worker to lead containing dust, create a potential for building contamination, or create possible lead containing waste, until all required pre-construction documentation has been reviewed and written approval has been received from the Owner and/or Project Monitor.

Activities expected to disturb lead-containing materials include, but are not limited to, painting preparation work such as scraping or sanding, penetration of painted surfaces through drilling or cutting, demolition of painted surfaces, removal of painted building components, and removal, drilling, or cutting of ceramic wall tiles. If the Contractor or subcontractors are observed conducting such activities without having written approval from the Owner and/or Project Monitor, they will be instructed to stop work. Work will not be allowed to resume until the Owner and/or Project Monitor provides approval for the work to begin.

This project involving potential disturbance of lead in the various painted materials is not considered a lead abatement project. The painting project at this site would be considered “lead related construction work”; therefore, it is Entek’s opinion the contractor is not required to submit a CDPH Form 8551 for this project.

1.2 Definitions

Action Level - Airborne exposure to lead at or above 30 µg/m^3 over an eight-hour-time-weighted average as discussed in 8 CCR 1532.1. Typically, when employees are exposed over the Action Level, the employer must provide blood testing, training in compliance with 8 CCR 1532, and air sampling.

Air Filtration Unit - A portable exhaust system equipped with HEPA filtration and capable of maintaining a constant low velocity air flow into contaminated areas from adjacent uncontaminated areas. At a minimum, the air intake for the air filtration device must have a pre-filter on it which can be changed within the containment area. In most cases, air filtration devices will need to pass challenge testing by DOP before they are allowed to be used on site.

Airlock - A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

Air Monitoring - The process of measuring the content of a known volume of air collected during a specific period of time.

Blood Testing - Blood testing for lead and zinc protoporphyrin in compliance with the requirements for medical surveillance as listed in 8 CCR 1532.1.

Cal/OSHA - California Division of Occupational Safety and Health. A California agency that implements and enforces numerous health and safety standards regarding lead.

Certified Lead Supervisor and Worker - Supervisors and workers currently certified by the California Department of Public Health (CDPH).

Challenge Testing - Process used to verify that HEPA-filtered equipment does not leak or exhaust asbestos, lead, or other particulate. This testing must be done by a testing company, not affiliated with the Contractor, and approved by the Owner and Project Monitor. Challenge testing normally uses an oil mist as the challenge agent and measures how much, if any, of the agent is exhausted from the machine being tested.

Clean Room - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of workers' street clothes and clean protective equipment. The term also includes the uncontaminated area or room of a Waste Transfer Airlock.

Containment - Isolation of the work area from the rest of the building to prevent escape of lead in dust, debris or in the air.

Contractor - The Contractor is the person or entity identified as such in the Contract Documents as being responsible for the environmental work as done in response to and in accordance with this document. References to the "Contractor" include the Contractor's authorized representatives. The Contractor may be a sub-contractor to the Primary Contractor. The Contractor normally will be responsible for paint preparation work that disturbs lead, paint scraping done prior to the demolition of structures, or the demolition of ceramic tile. The Contractor will typically need to use CDPH certified lead workers and supervisors to conduct their work that disturbs lead. Those employers disturbing smaller amounts of lead such as through drilling, cutting, or small component removal are typically known as a subcontractor for the purposes of this specification.

Critical Barrier - Critical Barriers are used to restrict water and airflow. Critical Barriers are the barriers placed over openings in the walls and ceilings of a work area in order to ensure that lead dust cannot escape the work area via these openings. Unless otherwise specified in these Specifications, critical barriers shall be constructed of at least one layer of six-mil thick poly.

Curtained Doorway - A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms. These are typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway and securing the vertical edge of the other sheet along the opposite vertical side of the doorway. Other effective designs are permissible as long as they are approved by the Project Monitor.

Decontamination Enclosure System - A series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers, containers, and equipment. This unit shall be constructed with at least two layers of six mil poly for the floors, walls, and ceiling. The floor of the dirty room shall consist of two layers of six mil poly plus a third layer of poly, four mil or thicker, to be used as a removable drop layer. Drop layer is to be removed as needed, but at least daily.

CDPH - California Department of Public Health. State agency that regulates the disturbance of lead in public buildings and on all structures in California. This agency and relevant regulations are primarily concerned with preventing childhood lead poisoning.

DOP - Dioctylphthalate particles, a testing agent for the efficiency of HEPA filters.

DOT - Department of Transportation, a Federal agency which has regulations and labeling requirements for the transportation of hazardous waste.

DTSC - Department of Toxic Substances Control, a department within the California Environmental Protection Agency charged with implementing and enforcing hazardous waste regulations.

Dust or Debris - Any visible dust or debris remaining in work area will be considered lead-containing residue.

Entek - Entek consulting Group, Inc. This is the Lead Project Monitoring/Management Firm for this project, and is the employer of the Project Monitor used on this project.

EPA - U.S. Environmental Protection Agency, a Federal agency that developed and enforces various asbestos and lead regulations.

HVAC - Heating, ventilation and air conditioning system.

HEPA Filter - A high efficiency particulate air filter capable of removing particles 0.3 microns in diameter from an air stream with 99.97% efficiency.

HEPA-Filtered-Vacuum Recovery System - This is a mechanical tool that has a shroud or covering over the area of a surface disturbed by a mechanical system in order to eliminate or significantly reduce the amount of dust released to the ambient air by the mechanical process. The shroud must be attached to a working vacuum with HEPA filtration.

HEPA Vacuum - A vacuum system equipped with HEPA filtration. Typically these units will need to be challenge tested before being allowed to be used inside of buildings on this project.

Lead-Based Paint - Materials meeting the definition of lead-based paint as defined by the California Department of Public Health and the United States Environmental Projection Agency. Currently defined as containing lead in concentrations equal to or greater than 1.0 mg/cm^2, 5000 ppm, or 0.5% by weight.

Lead-Containing Material - Materials that contain measurable, quantifiable amounts of lead. The disturbance of these materials is regulated by Cal/OSHA.

Lead-Containing Hazardous Waste - Materials required by the State of California to be packaged, labeled, transported, and disposed of as a lead hazardous waste.

Lead-Containing Waste Material - Lead-containing waster material that does not need to be treated as a lead-containing hazardous waste.

Lead Project Management or Monitoring Firm – The firm hired by Owner to provide third-party oversight of the disturbance of lead performed on the Owner's property by the Contractor or subcontractors.

Mil - A unit of length or thickness equal to one thousandth of and inch. Generally used when referring to the thickness of plastic (poly) sheeting used to contain the regulated area.

Movable Object - An unattached piece of equipment or furniture in the work area which can be removed from the work area.

Negative Air Machines - See Air Filtration Units.

NIOSH - The National Institute for Occupational Safety and Health. All respirators used on this project must be approved by NIOSH.

Outside Air - The air outside buildings and structures.

Owner - Property owner where the disturbance of lead will take place. For example, this may be a private building owner or manager, a government body such as a city or county agency, a military base, or a Owner district. This includes the Owner's authorized representatives and employees.

PEL - Permissible Exposure Limit (as used in 8 CCR 1532.1)

Permissible Exposure Limit (PEL) - Airborne exposure to lead above 50 $\mu g/m^3$ over an eight-hour, time-weighted average as discussed in 8 CCR 1532.1. Typically, when employees are exposed over the PEL, the employer must provide blood testing, respirators, protective clothing, shower decontamination, CDPH certification, regulated areas, and air sampling.

Poly - Flame-retardant polyethylene sheeting used to seal critical barriers, create cleaning barriers and drop layers, and to protect surfaces from damage or contamination.

Primary Contractor - The Contractor may not work directly for the Owner but instead subcontract with another contractor such as a general contractor or demolition contractor. The Primary Contractor is the entity responsible for hiring the Contractor if it is not the Owner.

Pre-start Meeting - Meeting held before the beginning of the project in which final details of the project are discussed and Contractor provides project monitor with pre-job submittal packet.

Project Monitor - An individual qualified by virtue of experience and education, designated as the Owner's representative and responsible for overseeing the work that disturbs lead on this project.

Project Monitoring - Activities undertaken by the Project Monitoring Firm for the purpose of monitoring the work done by the Contractor on this project in regards to the disturbance of lead.

Regulated Area - Term used by Cal/OSHA in 8 CCR 1532.1 to indicate a work area where exposure to airborne lead might exceed the Permissible Exposure Limit or where "Trigger Activities" may be performed. The area must be demarcated with signs and barriers designed to keep unauthorized people out of the area. Additionally "Regulated Area" means any measure used to restrict access to an area where personnel impacting lead-containing materials are required to wear respiratory protection and/or protective clothing by the project specifications regardless of airborne concentration of lead.

Renovation, Repair and Painting Program (RRPP) - US EPA 40 CFR Part 745 Lead-Based Paint (LBP) Poisoning Prevention in Certain Residential Structures. Regulations apply where there will be disturbance to lead-based paint in homes, child care facilities and pre-schools in child occupied facilities.

Shower Room - A room between the clean room and the equipment room in the decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination. Unless specified elsewhere in these specifications, or determined otherwise by the program monitor, the shower shall be on a metal pan to contain water splashed, leaked or spilled out of the shower unit.

Specifications - These written requirements describing procedures the Contractor must follow for this project.

Subcontractor - Contractors working for the Primary (General) Contractor but who are not primarily responsible for environmental work. For example, they may be responsible for, demolition, electrical, plumbing, general construction, minor painting, or other special trades.

Submittals - Pre-construction, interim construction, and post construction documents submitted by the contractor to the Owner as indicated in General Requirements and Bidding Requirements.

Trigger Task - Term commonly used to describe the tasks described by Cal/OSHA in 8 CCR 1532.1 (d)(2). These are tasks or activities that Cal/OSHA believes are expected to result in airborne exposures over the PEL until air monitoring proves otherwise. In brief, trigger tasks include manual demolition, scraping, sanding, using HEPA-attached equipment, using heat guns to remove lead paint, welding, torch cutting, and using other more aggressive techniques. (This is a summary list and does not list all tasks that are considered trigger tasks.) In addition, trigger tasks include any activity reasonably expected to result in airborne exposures to lead above the Permissible Exposure Limit.

View Ports - Clear windows into the regulated work area that allow authorized persons to view work activities inside the regulated area without entering the area. The view ports must be of sufficient number, constructed of materials of sufficient clarity, and be located in areas determined and/or approved of by the Project Monitor.

All regulated work areas including mini-enclosures will require view ports unless specifically determined not to be feasible by the Project Monitor.

Visible Emissions - Any emissions containing particulate material that are visually detectable without the aid of instruments. For example, dust, debris, and water leaks are considered visible emissions.

Waste Load-out/Transfer System - A decontamination system utilized for transferring containerized waste from inside to outside of the work area. A series of connected rooms used for the load-out of lead-containing materials that have been properly containerized.

Waste Bags - Waste bags for lead-containing waste must be a minimum of six-mil thickness. In general, double bagging will be required.

Waste Containers - Waste containers are the containers into which lead-containing waste is placed. They may be bags of at least six-mil thickness, metal or fiber barrels, or other containers such as cardboard boxes approved by the Project Monitor. The Contractor is responsible for assuring that the type of container chosen is acceptable to the waste landfill to which the waste will be transported. Waste containers must be labeled according to the requirements of the California Department of Occupational Safety and Health (Cal/OSHA), Department of Toxic Substances Control (DTSC), Department of Transportation (DOT), and the Environmental Protection Agency (EPA).

Waste Transfer Airlock - A decontamination system utilized for transferring containerized waste from inside to outside of the work area.

Wet Cleaning - The process of eliminating lead contamination from building surfaces and objects by using cloths, mops, or other utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as lead-contaminated waste.

Work Area - Designated rooms, spaces, or areas of the project in which the disturbance of lead is to be undertaken or which may become contaminated as a result of such action. A contained work area is a work area which has been sealed off from adjacent areas.

Work Plan - Contractor's written plan describing how the Contractor will perform the work in compliance with these specifications. The work plan shall include information on preparation of the work area, personal protective equipment, employee experience, training and assigned responsibilities during the project. It will also list decontamination procedures for personnel, work area and equipment, removal methods and procedures, required air monitoring program, procedures for handling and disposing of waste materials and procedures for final decontamination and cleanup.

Worker - A person who successfully meets the training requirements for the disturbance of lead as described in these specifications.

8 CCR 1532.1 - Chapter 8 of the Labor Code, California Code of Regulations, Section 1532.1: Lead (Known as the Lead Standard for the Construction Industry)

8 CCR 1544 - Chapter 8 of the Labor Code, California Code of Regulations, Section 1544: Respiratory Protection Standard.

1.3 Regulatory Compliance

Various agencies regulate work that disturbs lead-containing materials. The following is a summary of the most important agencies and regulations that apply during the disturbance of lead during construction work. This list is not to be considered comprehensive. The Contractor is responsible for complying with all applicable federal, state, and local regulations that may apply to the specific work they are conducting.

1.3.1 Environmental Protection Agency (EPA)

Lead: Identification of Dangerous Levels of Lead; Final Rule (40 CFR Part 745 Subpart D)

The EPA defines lead-based paint as paint and coatings that contain lead in concentrations equal to or more than one milligram per square centimeter (1 mg/cm^2), 5000 parts per million (5000 ppm), or one half of one percent (0.5%) by weight. EPA regulations apply to all housing and child-occupied facilities built before 1978. When the term "lead-based paint" is used in the context of these specifications, the term is used only to refer to paint that contains lead in concentrations equal to or greater than that defined by the EPA as lead-based paint. This is to differentiate lead-based paint from the term "lead-containing paint" as used for compliance with Cal/OSHA.

1.3.2 Housing and Urban Development (HUD)

Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance (24 CFR Part 35)

The HUD Rule for Federal Housing (shortened name) applies to all residential properties built before 1978 that receive Federal financial assistance. This regulation uses the same definition of lead-based paint as the EPA. The work practices and procedures described in these specifications are designed to comply with occupant and worker protection regulations as mandated by OSHA and Cal/OSHA regulations for work that disturbs lead and **are not** designed to comply with all the requirements of 24 CFR Part 35. Should this project be covered by this regulation, the Owner may require additional practices and procedures in the scope of work for activities conducted in properties covered by the HUD Rule for Federal Housing.

1.3.3 California Department of Public Health (CDPH)

Accreditation, Certification, and Work Practices For Lead-Based Paint And Lead Hazards (Title 17, CCR, Division 1, Chapter 8, Sections 35000-361000)

This regulation primarily applies to residential and public buildings located in California. The definition of a public building is one that is "generally accessible to the public." Some aspects of this regulation, particularly those that pertain to the definition of "presumed lead-based paint" and the containment requirements for disturbing lead-based paint **apply to all structures** in California.

This CDPH regulation definition of lead-based paint is identical to the EPA/HUD definition of 1 mg/cm^2, 5000 ppm, and 0.5% by weight. In addition, this regulation requires all paint on structures in California to be treated as "presumed lead-based paint" unless the paint is on a home built after 1978 or a Owner built after 1992. Therefore, the paint in all owner's buildings covered by this project that were constructed before 1993 must be treated as lead-based paint unless tested and proved otherwise as described elsewhere in these specifications.

The CDPH regulation differentiates between work that disturbs lead as part of renovation or maintenance work and work that disturbs lead as part of "abatement" work as defined in Title 17. The work practices and procedures described in these specifications are designed to comply with occupant and worker protection regulations as mandated by Cal/OSHA regulations for work that disturbs lead as part of renovation, demolition, and maintenance work. These specifications are not

designed to comply with the requirements for abatement as defined in the CDPH Title 17 regulation. Unless stated specifically otherwise in these specifications, the Owner does not anticipate any work being done as part of this project that meets the definition of abatement as used in Title 17. Therefore, unless specifically directed otherwise by this specification or by the direction of the Owner and/or Project Monitor, the Contractor and/or subcontractors shall NOT submit Form 8551, "ABATEMENT OF LEAD HAZARDS," to the CDPH since that form provides inappropriate notice for the work done on this project. The Contractor may be required to complete and submit this form should the scope of the work or the work practices change.

This regulation has significant penalties associated with the creation of "lead hazards." Lead hazards are defined as: "...disturbing lead based paint or presumed lead-based paint without containment, or any other nuisance which may result in persistent and quantifiable lead exposure." The requirements discussed in Part 3.5 Work Site Preparation & Containment Requirements are designed to meet CDPH requirements. Should a Contractor and/or subcontractor conduct work without a containment or release lead-contaminated dust or debris outside of the containment, they are in violation of this regulation. The Project Monitor will stop all work, consider the Contractor and/or subcontractor to be in violation of these specifications and the contract documents. Work will not be allowed to begin again until the Contractor and/or subcontractor takes adequate steps to correct their violation and convinces the Owner and/or Project Monitor that the violation will not occur again.

1.3.4 California Occupational Safety and Health Administration (Cal/OSHA)
Lead Standard for the Construction Industry (8 CCR 1532.1)

This standard regulates work done by employees who may disturb lead as part of demolition, construction, renovation or maintenance work. Painting activities that may disturb lead are covered by this standard. General construction work that disturbs lead is covered, as is the demolition of building components or entire structures.

Cal/OSHA regulates lead whenever lead is determined to exist in a material. When the term "lead-containing paint" is used in the context of these specifications, the term is used to refer to paint that contains lead in an amount equal to or above the reporting limit for the laboratory analysis or that detected by an X-ray Fluorescent Analyzer (XRF).

In addition, Cal/OSHA uses the EPA/HUD/CDPH definition of lead-based paint (1.0 mg/cm^2, 5000 ppm, or 0.5% by weight) for their pre-job notification requirements discussed in Part 1.4 Lead-Work Pre-Job Notification Requirements.

The following information summarizes the significant requirements in the Cal/OSHA standard. This summary is not meant to substitute for the Contractor reading and being familiar with the Cal/OSHA requirements.

a. The Cal/OSHA lead standard is very complex. Cal/OSHA regulates lead in materials when a laboratory can quantify the amount of lead. This means materials are regulated even when they contain very small amounts of lead. The standard sets an "Action Level" for airborne lead at or above 30 $\mu g/m^3$ over an eight-hour-time-weighted average. Typically, if employees are expected to be exposed to this airborne lead level, the employer must conduct air sampling, provide blood lead testing, and provide specialized training. The standard sets a "Permissible Exposure Limit" or "PEL" for airborne lead at or above 50 $\mu g/m^3$ over an eight-hour-time-weighted average. The employer must continue the requirements needed at the Action Level but must now provide respirators, protective clothing, a shower decontamination system, and a written compliance program.

b. In 8 CCR 1532.1 (p), employers are required to notify Cal/OSHA before employees conduct a trigger task that will disturb more than 100 square or linear feet of material that contains lead in concentrations equal to or above 1.0 mg/cm^2, 5000 ppm, or 0.5% by weight. The notification also applies to welding or torch cutting that takes more than one hour in a shift. Trigger tasks are described in 8 CCR 1532.1 (d)(2). In brief, they include manual demolition, scraping, sanding, using HEPA-attached equipment, using heat guns to remove lead paint, welding, torch cutting, and using other more aggressive techniques. This is a summary list and does not list all task that are considered trigger tasks.

c. The California standard defines lead-containing paint at the Consumer Product Safety Commission's (CPSC) level of 0.06% by weight or 90 ppm for non-trigger tasks. The lead standard would not apply if the paint contains less than 90 ppm and the employees do not conduct trigger tasks. However if the employees do conduct trigger tasks, the entire standard applies.

d. Cal/OSHA requires CDPH lead training and certification for any supervisors or workers who are "shown to be exposed" to airborne lead levels above the PEL in residential or public buildings. The Owner and Project Monitor believe that there is a reasonable expectation that those workers scraping paint prior to repainting, and those demolishing ceramic tile are likely to be exposed over the PEL. Therefore, on this project, that work must be done by CDPH certified workers and supervisors.

e. Cal/OSHA requires the supervisor to establish a "regulated area" whenever employees may be exposed to airborne lead over the PEL or if they will perform trigger tasks as defined in 8 CCR 1532.1 (d)(2). The establishment of regulated areas is discussed in Part 3.5 Work Site Preparation & Containment Requirements.

1.4 Lead-Work Pre-Job Notification Requirements

The Contractor is responsible for complying with the Lead-Work Pre-Job Notification as specified in 8 CCR 1532.1 (p). If notification is required for this project, the Contractor must provide the notification to Cal/OSHA and provide a copy of this notification to the Owner and/or Project Monitor as part of the Contractor's pre-work submittal package.

Unless the material is tested as described elsewhere in these specifications, the Contractor and subcontractors must anticipate notifying Cal/OSHA if they plan to manually demolish or perform another type of trigger task (such as paint scraping or sanding) on any painted surface or ceramic wall surface on this project if the amount of material to be disturbed equals or is greater than 100 square feet.

Notification to Cal/OSHA is not required if the paint on the painted surface is primarily intact (not loose and peeling) and the painted material is removed in a manner that does not disturb the paint. For example, door or window frames may be removed without providing the notification if the paint or coating on the frames is intact and the building components can be removed without significantly disturbing the coating.

Unless stated otherwise in these specifications, or directed otherwise by the Project Monitor, the Contractor and/or subcontractors shall NOT submit Form 8551, "ABATEMENT OF LEAD HAZARDS," to the CDPH since that form provides inappropriate notice for the work done on this project since no lead "abatement" as defined by CDPH will be conducted as part of this project.

1.5 Lead Training Requirements

At a minimum, the Contractor and subcontractors must meet the lead training requirements as specified by 8 CCR 1532.1. This will include training all employees who drill, cut, scrape, abrade, remove, clean up debris, or in any other way are exposed to lead from painted surfaces on the buildings or structures covered by this project. The different types of training are summarized below for the typical types of work that are expected to disturb lead on this project.

1.5.1 Minimal Training Required For All Workers Exposed To Lead

This training will be sufficient for those who disturb lead in only minor ways. Those disturbing lead in more significant amounts will need to meet the training requirements stated in Part 1.5.2 or 1.5.3.

For example, this training applies to those workers who, for a total of less than one hour in an eight-hour shift, will drill or cut through painted surfaces, remove painted components (when the paint is intact), or remove ceramic tile significantly intact. *This time frame is guidance and not an official Cal/OSHA time frame. This time frame is suggested because it is thought that these tasks, done for such a short time frame, do not pose a realistic chance that workers will be exposed over the Action Level based on an eight-hour time-weighted average.* In some cases, however, depending on the surface and type of work being conducted, the Project Monitor may determine that more training is needed even if the worker disturbs lead for less than an hour. In general, workers with this training conducting this type of minimal disturbance of lead will not need to wear respirators while conducting this work.

The training must comply with the training requirements as listed 8 CCR 1532.1(l)(1)(A). In summary, this training must comply with Hazard Communication Training for lead as discussed in 8 CCR 5194. This training is also known as “hazard communication,” or “lead awareness” training and is usually done in less than hour depending on the work the employee will conduct.

The Contractor and subcontractors will need to provide the Owner and/or Project Monitor written proof that this training has been provided before workers will be allowed to conduct work that disturbs lead even in minimal amounts. Entek can provide this training for the Contractor and/or subcontractors or they can obtain this training from any source the employer believes is qualified.

Proof of this training is not required if the employees are trained to the levels listed in Part 1.5.2 and/or 1.5.3.

1.5.2 Required Training For Those Exposed Over the Action Level Or Who Conduct Trigger Tasks

This training must be done for all those workers who conduct trigger tasks or are expected to be exposed above the Action Level. Typically, this training will be required for workers who conduct a trigger task such as paint scraping or manual demolition of painted components and the work will take more than one hour in an eight-hour shift. *This is a guidance and not an Cal/OSHA time frame.* The Project Monitor may determine that this training is needed for some workers who conduct tasks for even less than an hour.

The training must comply with the training requirements as listed 8 CCR 1532.1 (l)(1)(B) and (l)(2)(A-H). In summary, the standard requires the worker to be trained in series of subjects. The length of training depends on the experience and previous training of the worker, the type of work they will conduct, and whether or not they already have been trained and approved to wear respirators.

Workers receiving this training and conducting this type of work will typically need to wear respirators and protective clothing while they conduct the work.

An environmental contractor, or a contractor with environmental work experience, previous training, and a written respiratory protection program generally conducts this type of work. The Owner and Project Monitor do not recommend subcontractors attempt this type of work. However, subcontractors will be allowed to conduct this type of work on this project if they can demonstrate proof of training and carry out the work according to these specifications.

The Contractor and subcontractors will need to provide the Owner and/or Project Monitor written proof that this training has been provided all workers conducting the tasks that require this training. Entek can provide this training for the Contractor and/or subcontractors or they can obtain this training from any source the employer deems is qualified.

This training is not required if the employees are trained to the levels listed in Part 1.5.3.

1.5.3 Required Training For Those Who Are Reasonably Expected To Be Exposed Over The PEL And/Or Conduct Trigger Tasks On Over 100 Square Feet of Material

Workers and supervisors must be CDPH Certified Lead-Related Construction Workers or Supervisors if they will conduct trigger tasks or other work reasonably expected to exceed the PEL and/or conduct this work on over 100 square feet of material. *This is a guidance amount and not a Cal/OSHA regulatory requirement. However this amount of material and type of work is reasonably expected to potentially release airborne exposures over the PEL and thus trigger the CDPH certification requirement.* This includes work such as the manual demolition of painted surfaces, ceramic walls, paint preparation work (sanding and scraping), and other tasks as described in 8 CCR 1532.1 (d)(2). Proof of training will be a currently valid CDPH certification card. Workers who can show a completed course completion form and a completed application form for certification will be allowed to work pending their being fully certified.

Exception: Licensed asbestos contractors performing paint scraping work on the outside of buildings only for the purpose of removing loose and peeling paint prior to the demolition of the building, or the demolition of a structure, will not be required to have the workers or on-site supervisor be CDPH certified. They must, however, show proof of training in compliance with 8 CCR 1532.1 (l)(2) for employees who may be exposed above the Action Level. In summary they must meet the training requirements of this specification as stated in Part 1.5.2. In addition, however, the Contractor must have a CDPH certified supervisor approve the containment setup at the start of each shift that will disturb lead, approve the work practices and personal protective equipment worn by the workers, verify that proper air monitoring is being collected, must be able to return to the site within two hours if requested by the Project Monitor, and must approve the final cleanup of the work area prior to a visual inspection of the work area being conducted by the Project Monitor. The certified supervisor will always be required to approve the initial set up of the containment, personal protection, and work practices at the start of the job, but then depending on the quality of the work demonstrated, the Project Monitor may not require the certified supervisor to inspect the work site at the start of each shift. This exemption will be revoked should air sampling on this project demonstrate airborne lead levels above the Action Level on workers or supervisors.

1.5.4 Required Training for Projects Involving Disturbance of Lead-Based Paint in Child Occupied pre-1978 Homes, Child Care Facilities and Pre-schools

Workers and supervisors must be trained in accordance with the US EPA RRP regulations for painting activities.

1.6 Required Submittal Documents

While additional documents may be required by the scope of work for this project, at a minimum, the Contractor will be required to provide the Owner and/or Project Monitor with the following documents regarding the Contractor's ability to safely disturb lead-containing materials.

1.6.1 Submittals Prior To The Start Of Work

All Contractors and subcontractors who will have employees disturb lead on this project must, at a minimum, provide proof of item number 1.6.1.e.1., lead hazard communication training in compliance with 8 CCR 1532.1 (l)(A)(1). This is the only submittal that must be provided by these employers as long as they do not disturb conduct more disturbance of lead than is described in Part 1.5.1.

The following submittals must be provided by all Contractors and subcontractors who will, at a minimum, have employees who will conduct trigger tasks for more than one hour per shift, will potentially be exposed above the Action Level, or will conduct other activities as determined by the Project Monitor that may result in significant exposure to lead.

a. A written lead compliance plan in compliance with 8 CCR 1532.1 must be provided that includes the following:

1. A description of equipment and materials, controls, crew size, job responsibilities, and operations and maintenance procedures for each activity in which lead is disturbed and potentially emitted;

2. A description of specific control methods (wet methods, engineering controls, etc.) that will be used to ensure workers are not exposed above the PEL;

3. Technology considered in meeting the Cal/OSHA permissible exposure level (PEL);

4. Air monitoring data documenting sources of lead emissions;

5. A detailed implementation schedule for the compliance plan, including the schedule for inspections by a competent person;

6. A description of the lead work practice program which will be used to control worker exposures. This includes the use of protective work clothing, equipment, hygiene facilities and practices, and housekeeping practices;

7. A description of the steps the Contractor or subcontractor will take to minimize the generation of hazardous waste produced on this project. This includes, but is not necessarily limited to how the contractor will separate waste streams. For example, how will the Contractor or subcontractor keep potentially hazardous waste such as paint chips and dust from being disposed of with other potentially non-hazardous construction materials and debris?

Note: If a Contractor or subcontractor is found conducting lead-related work not specifically mentioned and described in the compliance plan, the work will be stopped until a compliance plan including that work is submitted, reviewed, and approved by the Owner and/or Project Monitor.

b. Copy of the Contractor or subcontractor's written respirator program in accordance with the requirements of 8 CCR 1544.

c. Proof that all employees expected to wear respirators on this project have medical approval to wear a respirator.

d. Copies of respiratory fit-tests for all workers expected to wear a respirator on this project. Fit testing must be done as required by and in accordance with 8 CCR 1544.

e. Proof of training required by Part 1.5 for type of work employee will do.

1. Proof of Hazard Communication Training for Lead done within the last calendar year for those exposed to lead or who will perform trigger tasks for less than one hour. *Proof may be a certificate or written statement stating training was completed and a list of names of those individuals who were trained. Proof of this training is not needed if employee provides proof of training required by items e. 2, or e 3.*

2. Proof of training in compliance with 8 CCR 1532.1 (l)(2) done within the last calendar year for all employees who will conduct trigger tasks as defined in 8 CCR 1532.1 (d)(2) for more than one hour or who will reasonably be expected to be exposed to lead above the Action Level. *Proof may be a certificate or written statement stating training was completed and a list of names of those individuals who were trained.*

3. Proof of CDPH lead certification for those workers who will conduct trigger tasks as defined in 8 CCR 1532.1 (d)(2) or will reasonably be expected to be exposed to airborne levels of lead above the PEL on projects that will disturb more than 100 square feet of lead-containing material. *Proof of certification will be a currently valid CDPH certification card as a worker or supervisor. Workers who can show proof of a valid course completion form and application being submitted to CDPH, will be allowed to work while awaiting full certification from CDPH.*

4. Proof of current CDPH certification as a lead supervisor for the on-site competent person for projects involving the conduction of trigger tasks or other activities reasonably expected to exceed the PEL on all projects that will disturb more than 100 square feet of lead-containing material. *Proof of valid certification will be a currently valid CDPH certification card a worker.*

5. If exception to requirement for CDPH certified supervisor listed in Part 1.5.3 is requested, then provide proof of CDPH certified supervisor who will verify containment, personal protection and work practices, and will be able to respond to the project within two hours of request by the Project Monitor.

6. Proof of training meeting the requirements of the US EPA RRP regulations if applicable.

f. Copies of all current SDS for chemicals used on this project.

g. Manufacturers' certifications that high efficiency particulate air (HEPA) vacuums, pressure differential units and other local exhaust ventilation equipment conform to ANSI Z9.2-79 for all HEPA-filtered equipment that will be used on this project. *This is proof that the equipment is actually HEPA filtered. This is separate from the challenge testing requirement needed for equipment used in interior spaces.*

h. Name and contact information of independent testing company who will challenge test all vacuums and air filtration devices used on this project.

I. Statement regarding compliance with all Cal/OSHA exposure monitoring required for this project.

j. Name and contact information for laboratory who will analyze air samples or waste samples and documentation of their certification to conduct such analysis.

k. Name of Waste Transporter who will transport hazardous waste on this project and documentation that the Transporter is allowed to transport lead hazardous waste.

l. Name of Waste Landfill to which lead hazardous waste will be sent and documentation that such landfill is allowed to accept such waste.

m. Should waste water filtration be required on this project, submit manufactures documentation pertaining to the capability of waste water filters to filter particles of, at a minimum, five micrometers in size.

n. List of all rented equipment to be used within a lead regulated area, or a statement that no rental equipment will be used on this project.

1. If rental equipment is to be used, submit written statements from each rental company indicating the rental company's acknowledgment that the equipment is provided for and may be used in areas where airborne levels of asbestos and/or lead may be present.

o. Submit emergency plans. At a minimum submit the following:

1. Submit non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments.

2. Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor.

3. Submit detailed written directions from the project site to the medical facility to be used in case of an emergency. Include a map which sufficiently shows the route to be taken from the site to the designated medical facility.

4. Submit written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.

p. Local sanitation district Wastewater Discharge Permit for Surface Washers (if required).

q. Cal OSHA Notification. This is required for this work on all projects that will disturb more than 100 square or 100 linear feet of lead in materials containing greater than 0.5%, 5,000 parts per million (weight by weight), or 1.0 mg/cm^2.

The above listed documents must be provided prior to the start of work that will disturb lead. Under no circumstances will workers or supervisors be allowed to work on this project prior to the receipt, review, and acceptance of this documentation by the Owner and/or Project Monitor. In addition, documentation for rental equipment must be provided before the equipment may be used in a lead

regulated area. All delays resulting from the failure of the Contractor and/or subcontractors to provide this information in the required time frame is solely the responsibility of the Contractor and/or subcontractor.

The Contractor must use the Pre-Work Submittal Checklist provided at the end of these specifications to provide the Owner and/or Project Monitor these submittals. Failure to use the form will likely lead to the rejection of the submittal package and a delay in the project that will be the sole responsibility of the Contractor and/or subcontractor.

The Contractor is responsible for maintaining current documents and resubmitting copies to the Owner and/or Project Monitor for any worker whose documents expire during the project. Any worker observed on a job site who either is not approved to conduct work by the Owner and/or Project Monitor or has been approved but documentation pertaining to training, medical evaluation, or respiratory fit testing has expired, will be instructed to stop work until these documents are received by the Owner and/or Project Monitor and the worker is approved to perform work that disturbs lead.

1.6.2 Submittals Provided During The Work Or Following Completion Of The Work If Applicable

Depending on the document, these documents must be provided the Owner and/or Project Monitor on an ongoing basis during the work, or if appropriate following completion of the physical activities associated with the project. The documents must be received and approved by the Owner and/or Project Monitor before the work is considered complete. Failure to provide these documents means the work is not complete, even though the physical activities may be completed.

a. Daily sign-in sheet for each worker entering a lead regulated area.

b. The Contractor must provide the results of exposure sampling done to comply with the requirements of 8 CCR 1532.1 (d) and the requirements of this specification.

c. The Contractor must provide blood sampling and analysis results of lead (BLL) and zinc protoporphyrin (ZPP) levels for all workers who are represented by air monitoring results that exceed the Action Level. Typically, the Project Monitor will require blood lead sampling for all workers on a work shift if one or more air sampling results for that shift is above the Action Level.

   The written results of the blood sampling analysis must be provided the Owner and/or Project Monitor within 21 days of the exposure over the Action Level or within 12 days of the completion of the project, whichever comes first.

d. Copies of job progress reports and project documentation. This must include the names of all employees onsite, the hours worked and a brief description of the work completed at the site(s).

e. The Contractor must provide all waste disposal documentation.

1.7 Third-party Oversight

The Owner may utilize the services of Entek Consulting Group, Inc. (Entek) as an independent third-party consultant to provide oversight of all work that disturbs lead on this project. The Contractor shall treat this third-party consultant as a designated representative of the Owner. The third-party consultant for this project is known as the Project Monitor. The Project Monitor is expected to perform some or all of the following activities on this project, but may also conduct other activities as needed:

a. Visually monitor the work practices of the Contractor's employees to determine that the work is being done in compliance with these specifications. The Project Monitor may conduct this activity on a continual basis or may make unannounced random visits to the project site to check on the Contractor's performance.

b. Visually inspect for the presence of visible emissions suspected to contain lead.

c. Conduct personal and area air monitoring in accordance with accepted methods.

d. Collect bulk samples of relevant materials to determine the presence or absence of lead.

e. Visually inspect the work area for cleanliness after completion of the work.

1.8 Air Sampling By The Owner and/or Project Monitor

The Owner and/or Project Monitor may determine it appropriate to collect air samples to evaluate the effectiveness of the Contractor's engineering controls and work practices. The Contractor and/or subcontractors shall allow the Project Monitor to attach and collect personal air samples on the workers and shall instruct the workers to comply with the directions for that sampling as given by the Project Monitor.

Air sampling may also be used to verify the effectiveness of the Contractor's containment system. The Project Monitor may choose to collect area air samples within the work area. These samples results may be used to generate an eight-hour, time-weighted average. The result of area samples in a lead work area should normally be far below what the workers are breathing. Therefore should the Project Monitor collect area air samples within the work area that result in exposures above half the Action Level (15 $\mu g/m^3$), the Project Monitor will require the Contractor and/or subcontractors to re-evaluate their work practices, engineering controls, and containment system.

The Project Monitor may also choose to collect area samples downwind, outside of the regulated work area. These sample results will be compared to background air samples upwind or samples collected prior to the beginning of work. Sample results indicating airborne lead emissions at or above 5 $\mu g/m^3$ above background levels will be interpreted to mean that the Contractor and/or subcontractors containment or engineering controls are inadequate. This may result in the temporary stoppage of work until the Project Monitor is assured that airborne lead levels will significantly diminish by the change in work practices or engineering controls.

1.9 Notification of Employers of Employees in Adjacent Areas

The Contractor and subcontractors who will disturb lead are responsible for ensuring that employers of employees in areas adjacent to the work being conducted have been notified that work disturbing lead will take place.

Typically this notification is in addition to the posting of lead regulated area signs. In summary, this notice shall be provided to all other contractors and subcontractors in areas adjacent to the work. Those employers must be notified in advance of any upcoming work that will disturb or impact lead in a manner that may generate airborne levels of lead that could present a potential exposure to workers at or above the Permissible Exposure Limit (PEL) as defined in 8 CCR 1532.1. This notice shall also provide information on the control measures being implemented and a warning that the employer's employees are to remain outside of the posted regulated areas. The Contractor and/or subcontractors anticipating the need for such notification shall coordinate this notification with the Owner and/or Primary Contractor.

1.10 Suspension Of Work

The Owner and/or Project Monitor may suspend all work that disturbs lead if any controls (such as barriers) fail, if debris known or suspected to contain lead is detected outside the containment, or if work is on the exterior of a structure and wind speeds are more than fifteen miles per hour, or if in the judgement of the Project Monitor, other factors exist that determine the work must be stopped because of the potential for the creation of lead hazards. For example, the Project monitor may conduct perimeter monitoring and discover that lead is being released in concentrations at 5 $\mu g/m^3$ above background levels or work area air monitoring that is above half the Action Level. In either case, the Owner and/or Project Monitor may suspend work until more effective containment, work practices, and engineering controls are utilized.

1.11 Pre-Start Meeting

The Project Monitor typically recommends that there be a pre-start meeting with the Contractor or subcontractor's representative and the Project Monitor approximately five days prior to the expected start of work. The Contractor will be expected to provide the majority of pre-work submittals described in Part 1.6.1 at that meeting. This meeting is designed to answer questions about the project and address issues of concern of either the Contractor, subcontractor, or Project Monitor. Should this meeting be determined not to be necessary, the submittals must be delivered to the Owner and/or Project Monitor no later than five working days in advance of the work.

1.12 Testing For Lead In Paints and Other Materials

The Owner believes lead is common in the paint in the buildings on this project based on age or limited testing. Therefore the Owner does not anticipate paying for additional testing of paint. However, in some cases, it may be in the interest of the contractor and/or subcontractors to determine the exact concentration of lead in the paint or coating since that will affect Cal/OSHA and CDPH compliance issues. For example, many interior surfaces will contain paint which contains less than 600 parts per million lead. Should the paint be tested and that discovered, much of the Cal/OSHA lead standard and much of the CDPH Title 17 standard won't apply.

For example, should the paint contain less than 600 parts per million lead, the contractor and/or subcontractors could drill into or conduct other non-trigger tasks on this material without extensive training. Also, the demolition of these surfaces would not trigger prior notification to Cal/OSHA.

Should the contractor and/or subcontractor wish the paint to be tested, they will need to request this of the Project Monitor. This testing must be done by the Owner's representative. The Project Monitor will be able to assist the contractor and/or subcontractor in determining if testing the material is likely to be worthwhile for the contractor and/or subcontractor.

PART 2.0 MATERIALS AND EQUIPMENT

2.1 Fire Resistant Plastic Sheeting (Poly)

All plastic sheeting used on this project must be fire resistant whether used inside or outside of buildings.

2.2 Challenge Testing Of HEPA Filtration Systems

All HEPA-equipped vacuums and air filtration units to be used on this project in interior spaces during operations that may disturb lead must be challenge tested and meet ANSI requirements using DOP or an equivalent testing agent. Except for HEPA air filtration units used to create negative pressure differentials for the demolition of ceramic tile, this testing must take place within ten calendar days prior to their use and after replacement of any HEPA filter removed from previously tested equipment. Air filtration units used in conjunction with the demolition of ceramic walls must be challenge tested on site. They do not need to be retested as long as they remain on site. They will need to be retested if they are moved off site. Copies of all testing certifications must be provided to the Owner and Project Monitor prior to use of the equipment.

Exception: Subcontractors using HEPA vacuums for incidental cleanup of lead dust resulting from the minimal disturbance of lead as discussed in Part 1.5.1 are exempt from the challenge testing requirement unless, in the judgement of the Project Monitor, there is a reasonable expectation that the subcontractor's HEPA vacuums are leaking.

2.3 Vacuum-Assisted Tools

When using power tools to disturb lead, the Contractor shall only use tools that have a HEPA-filtered-vacuum recovery system.

2.4 Power Washing

No high pressure or water blasting tools may be used if the spray will contact lead-containing paint.

For the purposes of this specification, power washing is defined as: The use of a low pressure "power washer" to rinse and/or wash stable, painted or coated surfaces to remove dust, dirt, grime, and other foreign matter in preparation for re-painting." Under no circumstance may power washing be used to remove lead-containing paints or coatings from surfaces. Before using power washing, all areas of loose, peeling, cracking, or unstable coatings must first be prepared for re-painting using the appropriate methods and personnel protective equipment as specified by Cal/OSHA and CDPH regulations, and these specifications. Typically this means all loose and peeling paint must be removed by hand scraping and sanding or the use of mechanical tools equipped with HEPA filtration.

Should a Contractor or subcontractor use power washing in a manner that releases paint from the surface, and that paint also not be contained, the Contractor or subcontractor will be responsible for all costs associated with the Owner hiring and environmental contractor to clean up the area. The area to be cleaned will be determined by the Project Monitor and will extend past the point of visually apparent debris.

Prior to performing power wash operations the Contractor must determine if the local sanitation district requires a Wastewater Discharge Permit for Surface Washers. Should this permit be required, the Contractor is responsible for obtaining it, accurately completing it and adhering to the permit requirements.

2.5 Personal Protective Equipment

The Contractor shall use NIOSH approved respirators and personal protective equipment as required by 8 CCR 1532.1 and as appropriate based on personal air monitoring results.

Respirator fit test records and the respiratory protection program shall be retained on site as part of the project documentation if respiratory protection is used on this project. Disposable dust/mist respirators shall not be used.

At a minimum, half-face respirators with P-100 (HEPA) cartridges will be required during surface preparation where there is manual scraping or sanding that will take more than one hour to complete. Dry scraping or sanding, mechanical scraping, abrading, sanding, or similar actions will trigger the need for respirators regardless of the duration of the activity.

Regardless of the duration of the work, all workers scraping lead-containing paint or removing or demolishing ceramic tile must wear disposable protective clothing over their wear home clothes. Workers demolishing surfaces that contain ceramic tile must wear full body protective clothing including hoods and gloves.

At a minimum, the Contractor and subcontractors must ensure that no lead dust or debris is tracked out of the contained, regulated area. The Contractor and subcontractors must ensure that all those allowed into the regulated area wear adequate foot coverings that ensure that they will not track contaminated material out of the area when the leave.

2.6 Rental Equipment

Any equipment rented for the purpose of disturbing lead or used within a lead regulated area must be accompanied with documentation verifying that the rental agency has been notified, and acknowledges receipt of notification that the equipment being rented will be used for work inside a lead regulated area. This documentation must be submitted to the Project Monitor prior to the equipment being used on the job site.

PART 3.0 EXECUTION

3.1 Summary

Contractors and subcontractors conducting lead related construction work will be evaluated on a performance standard which includes, but is not limited to, cleanliness of work area, work practices as verified by exposure monitoring, containment set up, and ultimately, the clean up of paint chips, dust, and debris.

Any work practice that creates paint chips, dust, glazed ceramic or painted debris must be conducted within a regulated area as defined in 8 CCR 1532.1 and within a containment at least as stringent as required by Title 17 and/or described in these specifications.

The containment system shall be designed and constructed to prevent visible dust or debris from escaping the work area as well as the escape of airborne lead emissions at or above 10 $\mu g/m^3$ above background levels. Should dust or debris generated by the work be found outside the containment, or the airborne lead outside the containment exceed background levels, the Project Monitor will determine that the containment is inadequate, in violation of Title 17 requirements, and work will be stopped until the Contractor and/or subcontractors redesign the containment to be more effective.

3.2 Compliance With Requirements For The PEL and Action Level

Contractors and subcontractors strictly adhering to the requirements listed in these specifications who conduct minimal disturbance of lead such as by the conduction of trigger task work amounting to less than one hour, may begin work assuming the Cal/OSHA Permissible Exposure Limit (PEL) will not be exceeded.

Contractors and subcontractors not strictly conforming to suggested work practices must start work assuming the PEL will be exceeded. This means they must comply with all OSHA requirements specified for work that results in exposures over the PEL. This will include, but is not limited to, complying with requirements for training, personal protection, regulated area development, blood testing, personal air monitoring, the development of a written compliance plan, and the notification of employers in adjacent areas.

Contractors and subcontractors must assume the PEL will be exceeded each time they conduct trigger activities that will exceed one hour in duration. This will trigger the need to wear respirators and protective clothing, meet the training requirements specified earlier in these specifications, conduct personal air sampling, develop a written compliance plan and all other actions described as necessary by 8 CCR 1532.1 and these specifications.

3.2.1 Personal Air Sampling

The Contractor and subcontractors are responsible for conducting personal air monitoring during disturbance of lead in compliance with the requirements of 8 CCR 1532.1. At a minimum, Contractors and subcontractors shall conduct representative exposure monitoring on workers on a daily basis whenever those workers will conduct trigger task activities that will take longer than one hour to complete in an eight-hour shift. In addition, air sampling must be done for any work for which the Project Monitor believes has a reasonable potential for generating airborne lead at or above the Action Level. The Project Monitor will not allow work to proceed if the Contractor is not prepared to conduct the necessary air monitoring.

Sample information must include (but is not restricted to) the name of the individuals wearing the samples, the individuals' Social Security Number or Company ID number, the date the samples were collected, identification by unique method of the area where the work is being performed, and identification of the work being performed. EXAMPLE: James Black, 000-11-222, 06/25/03, Bill

Jackson Elementary Owner, Building H, Classroom 5, East covered walkway, paint surface preparation work.

Laboratory results shall be provided to the Owner and/or Project Monitor within 72 hours of sample collection. Electronic copies must be received within 14 days of the Contractor receiving the results from the laboratory. Contractor and/or subcontractor must submit proof that laboratory has the required licenses to analyze air samples for lead.

Should they wish to make use of the exceptions to air sampling stated in 8 CCR 1532.1 (d)(3)© & (D), the Contractor and/or subcontractors must submit the required information to the Owner and/or Project Monitor and receive written approval from the Owner and/or Project Monitor prior to reducing the personal protection, containment, or engineering controls stated in this specification. In general, air sampling results that are intended for use to reduce personal protection requirements must be collected on this project. Air sampling results from other projects will not be allowed to create a negative exposure assessment for use on this project.

3.3 Work Involving Whole Component Removal Or Demolition Of Entire Structure

Intact lead-containing paint on construction debris is generally not considered a hazardous waste in California. However, loose and peeling paint on structures may result in all construction debris from that site being considered a hazardous waste.

Therefore prior to the demolition or removal of painted material and the disposal of that material, all loose, peeling or flaking paint must be removed. This includes objects such as fences, built-in furniture or cabinets, other similar structures, as well as entire structures being demolished.

Any paint debris generated during this work must be separated into appropriate waste streams and handled as a hazardous waste, or as deemed appropriate as discussed in Part 3.11 Lead Waste Management.

3.4 Prohibited Work Practices

The following work activities are prohibited on the project:

a. Open-flame burning or torching.

b Machine sanding or grinding of lead materials or surfaces coated with lead unless the machine is equipped with a HEPA-filtered-vacuum recovery system.

c. Un-contained hydro-blasting or high-pressure washing.

d. The use of power washing to remove loose and peeling paint.

e. Abrasive blasting or sandblasting without a HEPA-filtered-vacuum recovery system or done outside of a negative pressure enclosure.

f. Heat guns operating above 1,100 °F.

g. Dry scraping, except for limited areas where electrical hazards create a higher risk than lead or unless specifically approved by the Project Monitor.

h. Use of methylene chloride based paint strippers.

3.5 Competent Person

The Contractor and/or subcontractors disturbing lead shall have a competent person (as defined by Cal/OSHA for construction activities) onsite at all times to supervise and oversee all activities which may disturb materials containing lead.

3.6 Work Site Preparation & Containment Requirements

The Contractor and/or subcontractor is required to contain the disturbance of lead in a manner that prevents lead-contaminated dust, debris, water, or air from leaving the regulated work area in an uncontrolled fashion. The containment must be developed in compliance with the requirements of Title 17 and these specifications. The presence of lead dust, debris, or air above background levels will indicate that the containment is inadequate. Work will be stopped and the Contractor and/or subcontractor must adjust work practices, engineering controls, or the containment in a manner that convinces the Project Monitor that the material will no longer be able to escape the regulated work area.

3.6.1 Exterior Work Site Preparation & Containment

The Contractor and subcontractors are responsible for ensuring that building occupants and those in adjacent areas are not exposed to lead dust or debris as they enter or exit buildings. The Contractor and subcontractors shall ensure that building occupants and others in the adjacent area do not enter the lead regulated area and have a safe means of access and egress to the building.

Close all doors and windows within 20 feet of the renovation. On multi-story buildings, close all doors and windows within 20 feet of the renovation on the same floor as the renovation, and close all doors and windows on all floors below that are the same horizontal distance from the renovation.

Ensure that doors within the work area that will be used while the job is being performed are covered with plastic sheeting or other impermeable material in a manner that allows workers to pass through while confining dust and debris to the work area.

Cover the ground with plastic sheeting or other disposable impermeable material extending 10 feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to collect falling paint debris, whichever is greater, unless the property line prevents 10 feet of such ground covering. Ground containment measures may stop at the edge of the vertical barrier when using a vertical containment system.

The poly must be secured to the side of the building or structure with tape, or other anchoring system, so that there is no gap between the poly and the building or structure. The poly installed to cover ground or landscaping shall be installed in a manner to ensure that it will not blow away or billow from the wind. The use of weights such as wood is acceptable as long as the poly does not billow or blow in a manner that releases lead dust or debris off of it.

If the renovation will affect surfaces within 10 feet of the property line, the renovation firm must erect vertical containment or equivalent extra precautions in containing the work area to ensure that dust and debris from the renovation does not contaminate adjacent buildings or migrate to adjacent properties. Vertical containment or equivalent extra precautions in containing the work area may also be necessary in other situations in order to prevent contamination of other buildings, other areas of the property, or adjacent buildings or properties.

The exterior of all windows located within ten feet of any disturbance of lead must be sealed by covering them with at least one layer of six-mil thick poly sheeting. All ventilation machinery within 20

feet of the disturbance should be sealed by at least one layer of six-mil thick poly sheeting. Keep all windows within 20 feet of working surfaces closed, including windows of adjacent structures.

Should the disturbance of paint involve removing paint from the exterior of a window, then the Contractor or subcontractor must seal the inside of the window with two layers of six-mil thick poly. The Project Monitor will typically waive the requirement to seal the inside of the window with two layers of poly if the disturbance of lead involves less than 5% of the painted surface area of an exterior window.

Those in adjacent areas must be kept a sufficient distance from any chance of encountering lead dust and debris. Therefore the Contractor shall erect barrier tape at a distance sufficient enough from the poly barriers to ensure that those passing by the area are not directly adjacent to the poly containment barriers. In general, the barrier tape should be at least five feet from the edge of the poly placed on ground surfaces if those surfaces are accessible to unauthorized persons. The area off the poly sheeting, but inside of the barrier tape, is still part of the regulated area however and is not allowed to have any lead dust or debris present at any time.

The Contractor and/or subcontractor must post the regulated area sign as described in 8 CCR 1532.1 (m) (WARNING, LEAD WORK AREA, POISON, NO SMOKING OR EATING.) The posting may be done by wording on the barrier tape or by suspending OSHA-approved signs with the wording on the tape barriers or on readily apparent surfaces visible to persons outside the area.

All those entering the regulated area must sign in on a roster that documents their presence in the area. This roster must be provided the Owner and/or Project Monitor on a daily or weekly basis as determined by the Project Monitor.

Work disturbing lead shall not be conducted on exterior surfaces if wind speeds are greater than 15 miles per hour or, in the judgement of the Project Monitor, pose a risk of blowing lead dust or debris out of the regulated area.

In addition, for work done on ladders or man lifts, the Project Monitor is likely to require the workers to scrape loose and peeling paint directly into a container, rather than let the loose debris float down and possibly off the containment barrier. Typically the Project Monitor will allow the workers to scrape loose and peeling paint into a cardboard box held in one hand while scraping with the other hand.

Work must stop and cleanup occur before rain begins.

The Contractor shall not leave debris or poly sheeting out overnight if work is not completed. The Contractor shall keep all debris in a secured area until final disposal.

3.6.2 Interior Site Preparation & Containment

Remove all objects from the work area, including furniture, rugs, and window coverings, or cover them with plastic sheeting or other impermeable material with all seams and edges taped or otherwise sealed.

For interior work site preparation, one layer of six-mil poly sheeting must be placed on the entire floor. However, the entire floor area need not be covered by poly for large interior areas where the disturbance of lead is limited to the perimeter of the area. If the entire floor area is not covered with poly, the poly must extend out a minimum of ten feet from those areas where lead will be disturbed. The poly sheeting must be secured to the wall using tape so there is no gap between the floor and the wall. The poly must also be secured to the floor.

If individual rooms are being worked in, seal all doorways with a primitive airlock flap to prevent contamination of other areas of the building. Post the regulated area signs, as required by 8 CCR 1532.1 (m), at the entrance to the regulated area and all other entry points to the area.

All those entering the regulated area must sign in on a roster that documents their presence in the area. This roster must be provided the Owner and/or Project Monitor on a daily or weekly basis as determined by the Project Monitor.

If feasible, turn off all HVAC systems in the regulated work area. In addition, seal all ventilation systems in the regulated work area with a minimum of one layer of six-mil poly if they are within 20 feet of the disturbance of lead even if they are turned off.

3.6.3 Decontamination Procedures

Decontamination procedures shall be established by the Contractor and subcontractor depending upon the airborne concentrations of lead as well as the amount of dust and debris created by the work. At a minimum, the decontamination procedures shall be in compliance with 8 CCR 1532.1 (I)(1-5) assure that these decontamination facilities are used by the supervisor and workers.

For work that does not exceed the PEL, and/or does not include the disturbance of more than 100 square feet of material, the Contractor and/or subcontractor must assure that a hand-washing station is available and used by the supervisor and workers. For work that exceeds the PEL, the Contractor must ensure that workers shower, at a minimum at the end of the work shift as required by 8 CCR 1532.1.

3.6.4 Avoiding Contamination Of Adjacent Areas By Proper Decontamination

Should the Owner and/or Project Monitor discover that an occupant of the regulated area left the regulated area without properly decontaminating, the Contractor will be required to clean the adjacent areas that in the opinion of Project Monitor may have been exposed to lead dust or debris from this action. Failure to properly decontaminate is demonstrated by wearing protective clothing outside the regulated area that was previously worn in the area or by wearing footwear outside the regulated area that was not properly covered and/or decontaminated. The failure to adequately decontaminate will trigger the following cleaning. In all areas determined necessary by Project Monitor, the Contractor will be required to HEPA vacuum, then wet wash, then HEPA vacuum again all potentially contaminated areas and items to the satisfaction of the Project Monitor. The Project Monitor will not need to demonstrate the need for this cleaning by the presence of visible dust and will not need to collect settled dust samples in order to require the Contractor to implement the cleaning routine.

3.6.5 Approval Prior To Start Of Work

The Project Monitor shall visually inspect any regulated area for compliance with this specification before the contractor and/or subcontractor may begin work that may disturb lead. The contractor and/or subcontractors may not begin work disturbing lead without approval from the Project Monitor. The contractor and/or subcontractor must contact the Project Monitor sufficiently in advance of needing the visual inspection and coordinate with the Project Monitor in order to minimize any delays resulting from the need for this visual inspection.

3.7 Wet Work Practices

Unless determined infeasible by the Project Monitor, all disturbance of lead-containing materials must utilize wet methods for dust suppression.

3.8 Prompt Cleanup Of Debris

Removed lead-containing material shall be kept wet and promptly placed in the type of waste containers required by this specification. The Contractor and subcontractors are encouraged to place debris in containers shortly after it has been removed. However, at a minimum, all bulk debris must be containerized before any work stoppages such as for breaks, lunch, or the end of a shift. Bulk debris must be kept adequately wet until it is containerized. The Contractor must plan only to disturb amounts of material that can be cleaned up and containerized before the next work stoppage. Delays and additional costs incurred by the Contractor for failing to adequately calculate the amount of time needed to clean up debris will be the sole responsibility of the Contractor. For example, if a crew must work overtime to containerize debris before ending the shift, those additional costs are the sole responsibility of the Contractor.

The Contractor and/or subcontractor must not allow excessive amounts of dust and debris to gather on the floor containment barriers. If in the opinion of the Project Monitor, too much debris is being allowed to gather on the floor poly, the Project Monitor will require the Contractor or subcontractor to either assign a worker to conduct continual cleanup, or the workers scraping paint or conducting other work disturbing lead will have to contain the debris before it falls to the ground.

3.9 Final Cleanup Of The Work Area

3.9.1 Exterior Work Areas

The Contractor and/or subcontractor must HEPA vacuum up all visible dust and debris off containment barriers. Then gently roll and/or fold poly barriers in on themselves in order to avoid releasing any remaining dust to adjacent areas during this process.

The final step will be to vacuum up any visible dust or debris in the work area or regulated area that is suspected to contain lead. The area must be visually clean of all lead-related dust and debris, and all poly barriers must be removed before the workers leave the job site. The regulated area barrier tape and/or signs must be taken down. Critical barriers erected on windows and HVAC systems may be left in place if work will take place in those same areas during the next work shift. Otherwise those barriers must also be removed before the workers leave at the end of the shift.

3.9.2 Cleanup Of Interior Work Areas

All cleanup of the interior work area shall be performed using a HEPA vacuum and wet washing techniques. All surface areas in the work area that reasonably could have been exposed to airborne lead must be HEPA vacuumed and/or wet washed.

3.10 Final Inspection Of The Work Area

The Project Monitor will inspect work areas for visual signs of dust and debris related to the disturbance of lead. The Project Monitor will not inspect or evaluate the quality of paint preparation work such as paint scraping. The contractor who will be painting the prepared surfaces is responsible for the quality and workmanship of the surface preparation.

For exterior work, the Project Monitor will visually inspect the work area to determine that there is no visible dust or debris still in the area that is reasonably expected to have been generated by the work. All poly barriers (except for on critical barriers in areas needed for the next shift) and barrier tape and signs must be removed.

Until told otherwise by the Project Monitor, the supervisor must notify the Project Monitor in advance of the end of the shift in order for the Project Monitor to visually inspect the work area prior to the workers leaving for the day.

For interior work, the Project Monitor will conduct a thorough visual inspection for dust and debris that may be related to the disturbance of lead. All surface areas must be clean. Residue dust will be assumed to contain lead and must be cleaned.

Prior to requesting the Project Monitor for the visual inspection, the supervisor shall personally inspect the area and determine that it is clean and ready for a final inspection.

The Project Monitor typically will not collect dust wipe samples to verify the cleanliness of an area unless specifically stated otherwise elsewhere in these specifications. However, dust wipes may be collected in either of the following circumstances. In both cases the supervisor will be told of the possibility of the collection of dust wipes and encouraged to conduct extra cleaning of the areas.

a. The Project Monitor may collect dust wipe samples on the floor in the area between the decontamination unit and occupied areas of the property where children under the age of six routinely may be present. The supervisor will be told in advance that this testing will take place and is encouraged to clean the area between the decontamination area and where the sample will be collected. This sample will be collected within 20 feet of the decontamination chambers unless the Project Monitor believes that poor work practices or decontamination procedures have contaminated the area as discussed below.

b. Failure To Comply With Work Practices, Engineering Controls, Or Decontamination Procedures

   If in the judgement of the Project Monitor, the Contractor and/or subcontractor has not followed the requirements of this specification regarding work practices, engineering controls, and decontamination procedures, the Project Monitor will collect dust wipe samples in areas believed contaminated by the Contractor or subcontractors' actions. The supervisor of the project will be told in advance if such testing will be conducted and given time to clean those areas. For example, Part 3.6.5. describes actions that will lead to additional cleaning by the Contractor.

   Should dust wipe sampling be necessary, the Project Monitor will conduct such testing with the specified intent of verifying whether the containment process and decontamination processes used by the Contractor and/or subcontractor were adequate in preventing the release of lead dust from the work area. The samples will be collected according to the procedures required in Title 17. The containment will be judged appropriate if the results of the samples do not indicate a dust lead hazard for floors as specified in Title 17.

3.11 Power Washing of Exterior Building Surfaces

For the purposes of this procedure power washing is defined as the use of a low pressure "power washer" to rinse and/or wash stable, painted or coated surfaces to remove dust, dirt, grime, and other foreign matter in preparation for re-painting. In no circumstance is this to be construed as water blasting, and is not intended nor shall be used to remove lead-containing paints or coatings from surfaces. Loose and peeling paint must be removed by the other methods described in this specification before power washing may be conducted. Should power washing begin to release paint from the substrate, the Contractor must stop the power washing process and remove the loose material following the procedures described in these specifications.

3.11.1 Waste Water Discharge Permits

Many local sanitation districts require the completion and submission of a waste discharge permit prior to allowing the use of power washers. Therefore, prior to performing power- wash operations, the Contractor must obtain a Wastewater Discharge Permit for Surface Washers, if required, from the local Sanitation District, Water Quality Division; Industrial Waste Section, and adhere to the permit requirements. It is the Contractor's responsibility to obtain and properly fill out a current copy of this permit if it is required.

3.11.2 Required Work Practices For Power Washing

Where power washing of exterior surfaces of buildings coated with lead-containing paint(s) or seal coats is specified, or in those areas where the Contractor opts to use power washing to prepare surfaces, all of the following conditions must be met prior to uncontrolled washing without waste water control/collection measures. The following test is conducted prior to allowing the beginning of full power washing in order to verify that measurable amounts of lead are not being released by the washing process. Once it is determined that the washing process does not release lead, the Contractor will be allowed to proceed with power washing with only minimal additional requirements.

a. The Contractor in coordination with the Project Monitor shall select a minimum of one test area typical of the surfaces to be power washed. This area shall be100 or more square feet in area. On some sites where the building surfaces are different, the Project Monitor may require more than one area to be tested.

b. The Contractor shall construct a floor containment for the test areas. The containment must be designed to capture and collect all wash water and any paint chips generated during the assessment. The Contractor simply needs to use poly on the ground to create a basin like effect which will capture the spray water.

c. The Project Monitor will first collect a sample of source water such as from the hose tap. The Contractor will then be asked to power wash the test area in a similar manner as to how the building as a whole will be power washed. Work shall be halted if the washing process causes delamination of paint from the test area surfaces. Modifications to the methods and work practices shall be made prior to resumption of power washing and these modifications must be approved by the Project Monitor prior to their implementation.

d. The Project Monitor will collect one or more samples of the water runoff that was captured by the Contractor following power washing the test area. As long as there are no visible paint chips in the water and/or the amount of water is not excessive, the Contractor may release the captured water as long as it is absorbed by landscaping or will evaporate. No waste water resulting from power washing operations may be allowed to drain into any storm drain as required by the State of California.

e. The Project Monitor will send these samples to a laboratory for lead in water analysis. The sample results for the source water will be compared to the water runoff sample. If similar amounts of lead are present in each, the power washing process is unlikely to release lead into the water or surrounding area. The power washing process should not release lead as long as loose and peeling paint was removed prior to the start of power washing.

f. The Owner will pay for the collection of these water samples and their laboratory analysis.

g. The Project Monitor will notify the Contractor as soon as the results of the testing process are known. The Project Monitor and the Contractor will need to discuss alternatives to power washing in the unlikely situation that the water test shows lead contamination in the runoff water.

h. The Contractor shall assume that the testing and water analysis process will take a total of three work days. For example, if the test is done on the morning of the first day, the water samples will arrive at the laboratory on the morning of the second day. The results of the sampling process will be available on the afternoon of the third day. Since no power washing will be allowed until this testing process shows acceptable results, the Contractor must build this testing process into the work schedule. The Contractor may choose to accelerate the testing process but this will mean that the Contractor, rather than the Owner, will pay for the transportation of the samples to the laboratory and for the rush laboratory analysis. Even under “rush” conditions, it is very unlikely that the entire process could be completed in one day. The Contractor may want to schedule the testing process prior to the completion of other paint preparation work in order to have the results by the time the paint preparation work is complete.

I. Upon receiving approval to begin power washing, the Contractor will be allowed to proceed power washing the building. The Contractor must, however, notify the Project Monitor 24 hours in advance of the beginning of power washing in order for the Project Monitor to monitor the process should he or she feel that is appropriate.

j. Employee protective measures such as disposable clothing and respirators will not be required as power washing is not likely to result in airborne exposures of lead above the Action Level.

k. Waste water produced from power washing operations which does not contain chips of paint may be allowed to soak into the ground below the area being washed. If the area located below or around the surface to be washed does not allow for absorption into the ground, the water must be directed toward an area on the property that will allow for absorption into the ground or evaporation. The Contractor must take steps to ensure that no waste water enters storm drains regardless of the lead content of the water.

3.12 Lead Waste Management

Proper testing and disposal of all waste material is the responsibility of the Contractor.

The Contractor must plan the work in order to minimize the generation of hazardous waste during the disturbance of lead-containing materials. The Contractor must create separate waste streams as necessary to include separation of any loose paint chips or flakes debris from other construction debris. All waste streams must be identified by the Contractor before the work begins and separated during the course of the project to minimize costs of disposal.

The Contractor is responsible for all costs associated with the testing, removal, packing, loading, shipping, and disposal of lead containing waste generated during this project. This does not include waste water testing done to determine if power washing is permitted, which will be covered by the Owner.

The Contractor is required to comply with all regulations in Title 8 Section 1532.1 Lead in Construction and Cal/EPA Title 22 for waste classification and disposal.

3.12.1 Lead Waste Testing

The Contractor must conduct appropriate waste stream characterization testing and/or filtering prior to disposal of waste products such as water, sand, paint chips, vacuum debris, and filters generated during surface preparation activities. Once completed, the test analysis results must be submitted to the Owner and/or Project Monitor for review. The Contractor is responsible for all costs associated with waste stream testing. Contractors may choose to avoid some waste testing by presuming that the waste is a lead hazardous waste. Waste must be tested if the Contractor wishes to treat it as a non-hazardous waste.

The Contractor may not remove or dispose of the identified materials from the job site until this review has been completed and the Contractor has been informed by the Owner and/or Project Monitor of their concurrence that the materials have been properly tested and meet the requirements allowing the materials to be classified as non-hazardous.

3.12.2 Uniform Hazardous Waste Manifests

For all hazardous waste that requires an EPA manifest, the Contractor must coordinate with the Owner for signature of the manifest. In general, the Contractor must notify the Owner a minimum of 24 hours in advance of the need for a signature. Hazardous waste cannot be transported without an authorized signature so it is the responsibility of the Contractor to coordinate with the Owner the time waste transporters will need the signature. Delays resulting from the failure of the Contractor to obtain an authorized signature from the Owner will be the sole responsibility of the Contractor, unless the Owner was provided 24 hour in advance notice and the transporter arrived on time during the regular work hours of the Owner.

3.12.3 Waste Containers

All debris generated in the regulated work area shall be placed in DOT approved containers. The containers shall be leak tight and meet the requirements as stated in these specifications.

If in the judgement of the Project Monitor, the Contractor's method of containerizing debris is inadequate and either results in the release of dust or debris or is reasonably expected to result in such a release, the Contractor will be forbidden to continue waste containerization or load out until the containers meet the approval of the Project Monitor. This may result in the Contractor being required to change from one type of container to another. It must be understood that the Contractor is responsible for proper containerization of waste and therefore, will be required to provide for adequate and appropriate containers regardless of cost incurred due to failure of one system of containerization being required over another.

If utilizing bags to contain lead hazardous waste, two bags at least six-mil in thickness must be used. The inner bag may be sealed with adequate amounts of tape necessary to secure the opening of the bag. Only the second or final bag must be gooseneck sealed.

Regardless of the wastes characterization or designation as construction debris or hazardous waste, all waste containers shall be stored in designated and secure areas separate from the work area prior to testing and/or disposal.

The Contractor is responsible for proper storage and labeling of all hazardous waste containers while they are being used as storage and before they leave the job site according to the requirements of DTSC and DOT.

Building components such as wood with loose and flaking paint must, at a minimum, be wrapped in one layer of six-mil poly and adequately sealed with tape to secure the containerized material.

Concentrated lead waste such as sludge from paint stripping operations, lead containing paint chips and/or dust, HEPA vacuum contents and filters must be assumed to be hazardous waste until properly tested and must, at a minimum, be placed in poly lined, DOT approved drums.

Hard edged materials such as floor tile, gypsum board, plaster, stucco, ceramic tile, and other materials that may tear bags must be assumed to be hazardous waste until properly tested and must, at a minimum, be placed in poly lined, ridged-walled containers such as fiber drums or cardboard boxes as the final container.

Sharp edged components with peeling, blistering or flaking paint (e.g., nails, screws, metal lath, tin sheeting, door frames, etc.) must, at a minimum, be wrapped in one layer of six-mil poly sheeting, or a single six-mil thick bag and adequately sealed with tape to secure the containerized material.

3.13 Alternative Work Plans

The Contractor and/or subcontractors may submit alternate work plans to the suggested work practices and containment strategies as stated in these specifications. These alternate work plans or containment strategies must be approved by Owner and/or Project Monitor prior to their implementation.

PART 4.0 DOCUMENTATION SUBMITTAL REQUIREMENTS

Pre-Start Submittal Form

This form must be completed, signed, and submitted with the Contractor and/or subcontractors' documents required prior to the start of work. This form and these documents must be submitted to the Owner and/or Project Monitor in the time specified in the project documents prior to the start of work disturbing lead.

Please attach submittals in the order listed below. Please check off each item that is submitted. Write NA in spaces for which you believe the requirement is Not Applicable.

All Contractors and subcontractors who will have employees disturb lead on this project must, at a minimum, provide proof of item number 1.6.1.e.1., lead hazard communication training in compliance with 8 CCR 1532.1 (L)(A)(1). This is the only submittal that must be provided by these employers as long as they do not disturb more lead than is described in Part 1.5.1.

The following submittals must be provided by all Contractors and subcontractors who will, at a minimum, have employees who will conduct trigger tasks for more than one hour per shift, will potentially be exposed above the Action Level, or will conduct other activities as determined by the Project Monitor that may result in significant exposure to lead.

a. ____ A written lead compliance plan in compliance with 8 CCR 1532.1 must be provided that includes the following:

   1. ____ A description of equipment and materials, controls, crew size, job responsibilities, and operations and maintenance procedures for each activity in which lead is disturbed and potentially emitted;

   2. ____ A description of specific control methods (wet methods, engineering controls, etc.) that will be used to ensure workers are not exposed above the PEL;

   3. ____ Technology considered in meeting the Cal/OSHA PEL;

   4. ____ Air monitoring data documenting sources of lead emissions;

   5. ___ A detailed implementation schedule for the compliance plan, including the schedule for inspections by a competent person;

   6. ___ A description of the lead work practice program which will be used to control worker exposures. This includes the use of protective work clothing, equipment, hygiene facilities and practices, and housekeeping practices;

   7. ____ A description of the steps the Contractor or subcontractor will take to minimize the generation of hazardous waste produced on this project. This includes, but is not necessarily limited to how the contractor will separate waste streams. For example, how will the Contractor or subcontractor will keep potentially hazardous waste such as paint chips and dust from being disposed of with other potentially non-hazardous construction materials and debris.

b. ___ Copy of the Contractor or subcontractor's written respirator program in accordance with the requirements of 8 CCR 1544.

c. ___ Proof that all employees expected to wear respirators on this project have medical approval to wear a respirator.

d. ____ Copies of respiratory fit-tests for all workers expected to wear a respirator on this project. Fit testing must be done as required by and in accordance with 8 CCR 1544.

e. Proof of training required by Part 1.5 for type of work employee will do.

1. ___ Proof of Hazard Communication Training for Lead for those exposed to lead or who will perform trigger tasks for less than one hour. *(Proof may be a certificate or written statement stating training was completed and a list of names of those individuals who were trained. Proof of this training is not needed if employee provides proof of training required by items e. 2, or e. 3.)*

2. ____ Proof of training in compliance with 8 CCR 1532.1 (l)(2) for all employees who will conduct trigger tasks as defined in 8 CCR 1532.1 (d)(2) for more than one hour or who will reasonably be expected to be exposed to lead above the Action Level. *(Proof may be a certificate or written statement stating training was completed and a list of names of those individuals who were trained.) Not required if providing proof of training required in item e.3 and/or item e.4.*

3. ___ Proof of CDPH lead certification for those workers who will conduct trigger tasks as defined in 8 CCR 1532.1 (d)(2) or will reasonably be expected to be exposed to airborne levels of lead above the PEL. This is required for this work on all projects that will disturb more than 100 square feet of lead-containing material. *(Proof of certification will be a currently valid CDPH certification card as a worker or supervisor. Workers who can show proof of a valid course completion form and application being submitted to CDPH, will be allowed to work while awaiting full certification from CDPH.)*

4. ____ Proof of current CDPH certification as a lead supervisor for the on-site competent person for projects involving the conduction of trigger tasks or other activities reasonably expected to exceed the PEL. This is required for this work on all projects that will disturb more than 100 square feet of lead-containing material. (*Proof of valid certification will be a currently valid CDPH certification card)*

5. ____ If exception to requirement for CDPH certified supervisor listed in Part 1.5.3 is requested, then provide proof of CDPH certified supervisor who will verify containment, personal protection and work practices, and will be able to respond to the project within two hours of request by the Project Monitor. *(Only applicable for paint scraping work done prior to the demolition of buildings or structures.)*

6. ____ Workers and supervisors must be trained in accordance with the US EPA RRP regulations for painting activities.

f. ____ Copies of all current SDS for chemicals used on this project.

g. ____ Manufacturers' certifications that high efficiency particulate air (HEPA) vacuums, pressure differential units and other local exhaust ventilation equipment conform to ANSI Z9.2-79 for all HEPA-filtered equipment that will be used on this project.

h. ____ Name and contact information of independent testing company who will challenge test all vacuums and air filtration devices used on this project (in interior spaces).

I. ____ Name and contact information for laboratory who will analyze air samples or waste samples and documentation of their certification to conduct such analysis.

j. ____ Name of Waste Transporter who will transport hazardous waste on this project and documentation that the Transporter is allowed to transport lead hazardous waste.

k. ____ Name of Waste Landfill to which lead hazardous waste will be sent and documentation that such landfill is allowed to accept such waste.

l. __ Should waste water filtration be required on this project, submit manufactures documentation pertaining to the capability of waste water filters to filter particles of, at a minimum, five micrometers in size.

m ____ List of all rented equipment to be used within a lead regulated area, or a statement that no rental equipment will be used on this project.

1. ____ If rental equipment is to be used, submit written statements from each rental company indicating the rental company's acknowledgment that the equipment is provided for and may be used in areas where airborne levels of asbestos and/or lead may be present.

n. ____ Submit emergency plans. At a minimum submit the following:

1. ____ Submit non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments.

2. ____ Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor.

3. ____ Submit detailed written directions from the project site to the medical facility to be used in case of an emergency. Include a map which sufficiently shows the route to be taken from the site to the designated medical facility.

4. ____ Submit written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.

o. ____ Local sanitation district Wastewater Discharge Permit for Surface Washers (if required).

p.____ Cal OSHA Notification. This is required for this work on all projects that will disturb more than 100 square feet of lead-containing material.

The above listed documents must be provided in the time specified in the project documents prior to the start of work that will disturb lead. Under no circumstances will workers or supervisors be allowed to work on this project prior to the receipt of this documentation by the Owner and/or Project Monitor. All delays resulting from the failure of the Contractor and/or subcontractors to provide this information in the required time frame is solely the responsibility of the Contractor and/or subcontractor.

ALBERT EINSTEIN MIDDLE SCHOOL RE-ROOF & BEAUTIFICATION EXHIBIT B

Name, Signature, and Contact Information of Contractor's Personnel Completing Pre-Start Submittal Package

NAME: _____
(Print or Type)

SIGNATURE: _____

Telephone: _____

Fax: _____

Mailing Address: _____

_____

This Specification was Developed By:

Blake Howes
CDPH #3315
February 16, 2023

Phone: (916) 632-6800
Fax: (916) 632-6812

PART 5.0 RESULTS OF LEAD TESTING

Paints/Coatings/ Materials Determined to be Lead Based Paint (LBP)		
Paint/Coating Color or Material	**Lead Content**	**Component/Location**
Blue over Orange Colored Paint	193,138 ppm	Metal Support Columns - Associated with overhangs, covered walkways, and two story building throughout campus

LBP - Materials/coatings/paints meeting the definition of lead-based paint as defined by the CDPH and the US EPA, currently defined as containing lead in concentrations equal to or greater than 1.0 mg/cm^2, 5,000 ppm, or 0.5% by weight.

Paints/Coatings/ Materials Determined to be Lead Containing Paint (LCP)		
Paint/Coating Color or Material	**Lead Content**	**Component/Location**
Blue Colored Paint	4,841 ppm	Wood Door - Classrooms Where Present
Blue Colored Paint	1,063 ppm	Wood Door Frame - Classrooms Where Present
Beige Colored Paint	1,276 ppm	Corrugated Metal Ceiling Deck - Covered Walkways Throughout Campus

LCP - Materials/coatings/paints which contain measurable amounts of lead. The disturbance of these materials/coatings/paints is regulated by Cal/OSHA.

Paints/Coatings/Materials Determined NOT TO Contain Lead	
Paint/Coating Color or Material	**Building Component**
Blue Colored Paint	Metal Fascia - Throughout Campus
Blue Colored Paint	Metal Drip Edge Roof Flashing - Throughout Campus
Beige Colored Paint	Exterior Concrete Walls - Throughout Campus
Beige Colored Paint	Exterior Wood Stub-Out Foundations (Assumed to be previous locations of exterior lockers)
Beige Colored Paint	Exterior Stucco - Covered Walkways at South 2 Story Building

Paints determined “NOT TO” contain lead for the purposes of this report are those samples which when analyzed did not indicate lead to be present at or above the limit of detection for the analysis method used. This limit of detection was 100 parts per million (ppm). As a result, any paints shown “NOT TO” contain lead will not require any special training or work practices related to lead when impacted.

ALBERT EINSTEIN MIDDLE SCHOOL RE-ROOF & BEAUTIFICATION EXHIBIT B

A lead in paint inspection was conducted by Entek Consulting Group, Inc. for the (building name and project area) and a report was prepared on (date).

C:\Users\bhowes\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Sacramento City USD\23-6539 Einstein MS, Roof\Specifications\Lead in Construction Painting Specs 2-16-23.wpd