

ASBESTOS & LEAD INSPECTION REPORT

MARCH 6, 2023

BEM PROJECT NO. 23-59675

<u>Site</u>

City of Merced 415 West 18th Street Merced, CA 95340

Prepared For

Ms. Sarah Knoester City of Merced 678 West 18th Street Merced, CA 95340

Prepared By

BOVEE ENVIRONMENTAL MANAGEMENT, INC.

1643 3rd Street, Escalon, CA 95320

Escalon 209-847-3800 • Fresno 559-264-3800 • Bakersfield 661-246-2110 • Sacramento 916-564-3838

March 6, 2023



Ms. Sarah Knoester City of Merced 678 West 18th Street Merced, CA 95340

Ms. Knoester:

Bovee Environmental Management, Inc. (BEM) is pleased to provide this Asbestos & Lead Paint Survey Report regarding our asbestos and lead inspection services at the Project Site summarized below.

PROJECT SUMMARY TABLE

PROJECT SITE NAME	PROJECT SITE LOCATION	PROJECT SITE NOTE
City of Merced	415 West 18th Street, Merced, CA 95340	Renovation/Water Damage
INSPECTION TYPE	INSPECTED AREAS	INSPECTION DATE
Commercial Asbestos & Lead Survey	Office & Closet	March 3, 2023

ASBESTOS INSPECTION SUMMARY

Samples of building materials considered to be *suspect asbestos containing materials** were identified and collected from the inspected renovation areas referenced above to determine their asbestos content. Samples collected from specific areas for the purpose of renovation activities are determined by the client. There may be areas within the Subject Site that were not inspected and may contain additional suspect asbestos containing materials that were not sampled. Through proper chain-of-custody the collected samples are sent to BEM, Inc Laboratories for polarized light microscopy (PLM) analysis. A summary of all materials sampled and corresponding analytical results are listed below. Detailed information regarding sample number, actual sample location and analytical methods can be reviewed in attachments A and B.

SAMPLE COLLECTION SUMMARY

*See definitions on page 3.

#	MATERIAL SAMPLED	MATERIAL LOCATION	ASBESTOS	CATEGORY	SQ.FT.
59675-01	Carpet Mastic (Layer 1)	Office; Floor Beneath Carpet	None Detected	-	-
59675-01	9" x 9" VFT (Layer 2)	Office; Floor Beneath Carpet	4% Chrysotile	Category I*	195
59675-02	Mastic	Office; Floor Beneath Carpet	None Detected	-	-
59675-03	Cove Base Mastic	Baseboards Throughout	None Detected	-	-
59675-04	Plaster	Walls Throughout	None Detected	-	-
59675-05	Plaster	Walls Throughout	None Detected	-	-
59675-06	Plaster	Walls Throughout	None Detected	-	-

ASBESTOS DEFINITIONS

<u>Suspect Asbestos Containing Material (ACM)</u> - Local air quality management districts consider a material that is not wood, metal or glass, to be a suspect ACM. All suspect ACMs are assumed to contain asbestos until laboratory analysis confirms that a material has no asbestos content.

<u>Category</u> – ACM's are classified as either "friable", material that <u>can</u> be easily crushed or pulverized by normal hand pressure or as "non-friable", material that <u>cannot</u> be easily crushed or pulverized by normal hand pressure. Friable ACMs are considered a Regulated Asbestos Containing Material (RACM) requiring Class I work practices and engineering controls. Non-friable ACMs are considered either Category I or Category II Asbestos Containing Material requiring Class II work practices and engineering controls.

<u>Trace</u> - Analytical result that is equal to or less than 1.0 percent asbestos by weight, but greater than 0.1 percent. Materials with a trace amount of asbestos have to be removed as asbestos containing construction material (ACCM) according to Cal-OSHA, but can be disposed as non-ACM upon point count analyses according to federal and state EPA regulations.

<u>Homogeneous</u> – Multiple samples collected of a suspect material that is similar in general appearance and from areas that appear to have been constructed at the same time are considered homogeneous. If multiple samples are collected from a similar material within a homogeneous area and only one of the multiple samples is found to contain asbestos, regulations mandate that the entirety of that material with the homogeneous area must be considered an ACM.

<u>VFT</u> – Vinyl Floor Tile <u>TBD</u> – To be determined

ASBESTOS REGULATORY STANDARDS

California Occupational Safety and Health Administration (Cal-OSHA)

- •Friable and Non-Friable ACCMs containing more than 0.1 percent asbestos by weight are regulated.
- •Enforces regulations pertaining to workers performing ACCM removal and workers in close proximity.
- •Contractors who disturb more than 100 square feet or 160 lineal feet of ACCM must be registered by the contractor's state license board as an asbestos removal contractor.
- •Contractors who disturb <u>any amount</u> of ACCM must ensure employee protection by providing accredited training, medical examinations, personal protective equipment and a negative exposure assessment.

United States Environmental Protection Agency (EPA)

- •Friable and Non-Friable ACMs containing more than 1.0 percent asbestos by weight are regulated.
- •Enforces regulations pertaining to protecting the environment, not workers.
- •Abatement Contractors who disturb more than 160 square feet or 260 linear feet of ACM must comply with the National Emissions Standards for Hazardous Air Pollutants Asbestos Regulations (40 CFR 61, Subpart M) and all state and federal requirements regarding asbestos.

Local Air Quality Control Districts

- •Friable and Non-Friable ACM's containing more than 1.0 percent asbestos by weight are regulated.
- •Enforces regulations pertaining to local air quality; "No Visible Air Emissions".
- •Require an asbestos survey prior to renovation or demolition.
- •Abatement Contractors who disturb more than 160 square feet or 260 linear feet of ACM must comply with the National Emissions Standards for Hazardous Air Pollutants Asbestos Regulations (40 CFR 61, Subpart M).

ASBESTOS RECOMMENDATIONS

BEM recommends compliance with all federal, state and local regulations concerning asbestos.

ASBESTOS WARRANTY

Samples of suspect asbestos containing building materials, which could be disturbed during construction activities, are collected by BEM. Site inspections and sample collection methodologies are performed to meet regulatory standards and industry protocols. BEM warrants that the findings contained herein have been promulgated in general accordance with accepted professional practices at the time of its preparation as applied by professionals in the community. There is a possibility that conditions may exist in which suspect ACM's could not be identified within the scope of the survey or were not apparent or accessible during the site visit. All scheduled work should cease and additional samples should be collected if unidentified suspect ACM's are discovered during construction activities.

If quantities of asbestos containing materials are stated in this report, they are supplied for budgetary and regulatory notification purposes only. They should not be relied on for abatement bidding purposes.

LEAD INSPECTION SUMMARY

BEM visually inspected and identified all components and substrates throughout the Subject Site that will be impacted during renovation activities. These surfaces were representatively sampled and analyzed for lead content. Utilizing an X-Ray Fluorescence Spectrometer (XRF), the substrates within the Subject Site's renovation/demolition areas were analyzed for their lead concentration levels. A summary of the substrates sampled and corresponding analytical results are listed below.

#	SAMPLE DESCRIPTION	SAMPLE LOCATION	LEAD mg/cm ²
59675-L1	Paint (Yellow)	Wood Trim Throughout	5.0
59675-L2	Paint (Light Yellow)	Plaster Walls Throughout	5.0

(Lead Based = $\geq 1.0 \text{ mg/cm}^2$) (Lead Containing = $< 1.0 \text{ mg/cm}^2$) (No Lead Detected = 0 mg/cm^2)

LEAD RECOMMENDATIONS

Any substrates listed in the table above having a lead concentration level greater than or equal to 1.0 mg/cm² should be considered lead based. If these substrates are to be impacted during renovation activities then proper lead abatement practices, engineering controls and worker protection should meet all regulatory standards mandated by Cal-OSHA Title 8.

Any substrates listed in the table above having a lead concentration level less than 1.0 mg/cm² should be considered lead containing. Regulations mandated by Cal-OSHA Title 8 are still in effect for renovation activities.

Any substrates listed in the table above having a lead concentration level of 0 mg/cm² should be considered lead free, however regulations mandate that all workers involved in renovation activities shall receive appropriate EPA-RRP lead awareness training so that activities which could potentially create an exposure risk can be avoided.

BEM recommends compliance with all federal, state and local regulations concerning lead paint.

LEAD WARRANTY

Site inspections and sample collection methodologies are performed to meet regulatory standards and industry protocols. BEM warrants that the findings contained herein have been promulgated in general accordance with accepted professional practices at the time of its preparation as applied by professionals in the community. There is a possibility that conditions may exist which could not be identified within the scope of the survey or were not apparent or accessible during the site visit.

DISCLAIMER

If asbestos containing materials were impacted and/or damaged during a fire loss, then the soft and/or porous building materials and personal contents should be removed and disposed of as Asbestos Containing Building Materials (ACBM). The hard and/or nonporous building materials and personal contents can be cleaned and decontaminated on site. The locations surrounding the damaged areas should be considered contaminated with asbestos. BEM cannot assume these other areas were not impacted with asbestos. BEM recommends to either assume the building materials and/or personal contents within these surrounding locations are contaminated with asbestos; or micro-vac TEM samples can be collected within these surrounding locations to determine if the asbestos contamination migrated to these surrounding locations adjacent to the known contamination.

CERTIFICATION

Inspection services relative to the Subject Site were provided by BEM's Mr. Brett L. Bovée & Anthony J. Miller, Certified Asbestos Consultants, No. 95-1643, expiration on 03/08/2023 & Number 19-6474, expiration on 04/17/2023. and California Department of Public Health Inspector/Assessor's/Project Monitor, ID# 1494/1493, expiration on 07/07/2023 & ID# 8476, expiration on 03/24/23.

BEM looks forward to assisting you in the near future. If you have any questions regarding this report or other BEM services, please do not hesitate to call us at (209) 847-3800 or (559) 264-3800.

Regards,

Brett L. Bovée

Brett L. Bovée, CAC, CMC, CDPH Certified Asbestos Consultant No. 95-1643 CDPH Inspector/Assessor, ID# 1494 CDPH Project Monitor, ID# 1493





Anthony J. Miller

Anthony J. Miller, CAC, CDPH Certified Asbestos Consultant No. 19-6474 CDPH Inspector/Assessor, ID# 8476





ATTACHMENT A

BEM
SAMPLE FIELD SHEETS



CHAIN OF CUSTODY

1643 3RD STREET ESCALON, CA 95320

833-643-3800 ● BEM@BOVEEINC.COM

BEM PROJECT #	23-59675	TURN-AROUND TIME
SAMPLE DATE:	3-3-23	○ SAME DAY 24HOURS
SURVEY TYPE:	Ren d	0

Project Na	oject Name: City of Merced, commercial		Point Count Trace Results												
Address:		415 West	18th sty Merce	od, ch as	340					○ YES	-400 () YES	S-1000	M)
Type of Lo	oss:	Water Dai													
Areas Insp	pected:	office &c	•									ect			
Sample#	Sample	e Description			Surface	T. Time	LPM	Vol./Qua.	PLM	XRF	PCM	Mold Direct	E-COLI	AAS	3
39675		GYQ VFT			W C FL				4				0 0		
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-02	Mat. Loc		•		W C FL				•	0	0	0	0 0) C) (
-03	Mat. Loc.:	··CBM) ·TIO (Baselbo	hards)		W C FL Ô ○○				•	0	0	0	0 0) C) ()
784	Mat. Desc	"Paxer			W C FL				9	0	0	0	0 0) C) (
- <u>ه</u> ح		- Plaster			W C FL ② ○○				•	0	0	0	0 0) C) (
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 	Mat. Loc.:	c.:			W C FL				0	0	0	0	0 0) C) (
59675 - LI		्रन्यंग्रस्पुर्धाळ) Moodff(m)	pos 5.0	W C FL				0	•	0	0	0 0) C) (
-12	Mat. Loc	paint (light	hellom) broader	180s 5.0	W C FL				0	4	0	0	0 0) C) (
	Mat. Loc.:	c.:			W C FL				0	0	0	0	0 0) C) (
	Mat. Loc.:	c.:			W C FL				0	0	0	0	0 0) C) (
	Mat. Loc.:	c.:			W C FL				0	0	0	0	0 0) C) (
	Mat. Loc.:	c.:			W C FL				0	0	0	0	0 0) C) (
	Mat. Desc	c.:			W C FL				0	0	0	0	0 0) C) (
	Mat. Desc	c.:			W C FL				0	0	0	0	0 0) C) (
	Mat. Desc	c.:			W C FL				0	0	0	0	0 0) C) (
	Mat. Loc.:	c.:			W C FL				0	0	0	0	0 0) C) (
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ATTACHMENT B

LABORATORY ANALYTICAL REPORTS



Report Prepared For:

Bovee Environmental Management 1643 3rd Street Escalon CA 95320

 Client Project:
 23-59675

 Report ID:
 AE230617

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on **March 06, 2023**. The samples were analyzed for asbestos using polarizing light microscopy (PLM) under EPA 600/R-93/116 and EPA – Appendix E to Subpart E of 40 CFR Part 763 Methods.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

TOTAL SAMPLES ANALYZED: 6

TOTAL LAYERS ANALYZED: 10

LAYERS >1% ASBESTOS: 1

NVLAP Lab Code 600260

Danielle Carrier

Kind Regards,

Laboratory Director



ASBESTOS REPORT SUMMARY

By: POLARIZED LIGHT MICROSCOPY

Client Project: 23-59675 Report ID: AE230617

Client: Bovee Environmental Management

1643 3rd Street Escalon CA 95320

Methodology: EPA 600/R-93/116 and EPA – Appendix E to Subpart E of 40 CFR Part 763

Layer	Lab ID	Color	Sample Description	% Asbestos
1	AE2303892	Brown	Carpet Mastic	None Detected
2		Beige	9X9 Vinyl Floor Tile	Chrysotile 4%
1	AE2303893	Black	Mastic	None Detected
1	AE2303894	Tan	Cove Base Mastic	None Detected
1	AE2303895	White	Plaster Skim Coat	None Detected
2		Grey	Plaster Base Coat	None Detected
1	AE2303896	White	Plaster Skim Coat	None Detected
2		Grey	Plaster Base Coat	None Detected
1	AE2303897	White	Plaster Skim Coat	None Detected
2		Grey	Plaster Base Coat	None Detected
	1 2 1 2 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1	1 AE2303892 2 1 AE2303893 1 AE2303894 1 AE2303895 2 1 AE2303896 2 AE2303897	1 AE2303892 Brown 2 Beige 1 AE2303893 Black 1 AE2303894 Tan 1 AE2303895 White 2 Grey 1 AE2303896 White 2 Grey 1 AE2303897 White	1 AE2303892 Brown Carpet Mastic 2 Beige 9X9 Vinyl Floor Tile 1 AE2303893 Black Mastic 1 AE2303894 Tan Cove Base Mastic 1 AE2303895 White Plaster Skim Coat 2 Grey Plaster Base Coat 1 AE2303896 White Plaster Skim Coat 2 Grey Plaster Base Coat 1 AE2303897 White Plaster Skim Coat



AE230617

Report ID:



By: POLARIZED LIGHT MICROSCOPY

Client: **Bovee Environmental Management**

Received: 03/06/2023 1643 3rd Street Analyzed: 03/06/2023 Escalon CA 95320 Reported: 03/06/2023

Client Project: 23-59675

Methodology: EPA 600/R-93/116 and EPA – Appendix E to Subpart E of 40 CFR Part 763

Client ID Sample ID	Lab Description	Lab Attributes	NON-ASBEST Fibrous	OS COMP	ONENTS Non-Fibrous		ASBESTOS %
59675-01 AE2303892	LAYER 1 Carpet Mastic	Brown Homogeneous Non-Fibrous Bound			Mastic	100%	None Detected
	LAYER 2 9X9 Vinyl Floor Tile	Beige Homogeneous Non-Fibrous Bound			Vinyl Binder/Filler	61% 35%	Chrysotile 4%
59675-02 AE2303893	Mastic	Black Homogeneous Non-Fibrous Bound			Mastic	100%	None Detected
59675-03 AE2303894	Cove Base Mastic	Tan Non-Fibrous Bound			Mastic	100%	None Detected
59675-04 AE2303895	LAYER 1 Plaster Skim Coat	White Heterogeneous Non-Fibrous Tightly Bound			Silicates Binder/Filler Paint	65% 30% 5%	None Detected
	LAYER 2 Plaster Base Coat	Grey Heterogeneous Fibrous Tightly Bound	Cellulose Fiber	<1%	Silicates Binder/Filler	70% 30%	None Detected
5 9675-05 AE2303896	LAYER 1 Plaster Skim Coat	White Heterogeneous Non-Fibrous Tightly Bound			Silicates Binder/Filler Paint	65% 30% 5%	None Detected
	LAYER 2 Plaster Base Coat	Grey Heterogeneous Fibrous Tightly Bound	Cellulose Fiber	<1%	Silicates Binder/Filler	70% 30%	None Detected



AE230617

Report ID:



By: POLARIZED LIGHT MICROSCOPY

Client: **Bovee Environmental Management**

Received: 03/06/2023 1643 3rd Street Analyzed: 03/06/2023 Escalon CA 95320 Reported: 03/06/2023

Client Project: 23-59675

Methodology: EPA 600/R-93/116 and EPA – Appendix E to Subpart E of 40 CFR Part 763

Client ID Sample ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPON Fibrous		NENTS Non-Fibrous		ASBESTOS %
59675-06 AE2303897	LAYER 1 Plaster Skim Coat	White Heterogeneous Non-Fibrous Tightly Bound			Silicates Binder/Filler Paint	65% 30% 5%	None Detected
	LAYER 2 Plaster Base Coat	Grey Heterogeneous Fibrous Tightly Bound	Cellulose Fiber	<1%	Silicates Binder/Filler	70% 30%	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZED LIGHT MICROSCOPY

Report ID:

2300963

Bovee Environmental Management 1643 3rd Street

Received: 03/06/2023 Analyzed: 03/06/2023

Escalon CA 95320

Reported: 03/06/2023

Client Project: 23-59675

LEGEND:

Client:

Non-Anth = Non-Asbestiform Anthophyllite

Non-Trem = Non-Asbestiform Tremolite

METHOD:

EPA 600/R-93/116 and EPA - Appendix E to Subpart E of 40 CFR Part 763

REPORTING LIMIT:

<1% by Visual Estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT:

>1% by Weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under any of Bovee Environmental's laboratory accreditations. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Bovee Environmental Management, Inc (BEM). BEM makes no warranty representation regarding the accuracy of customer submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the customer. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the customer to claim product endorsement by NVLAP, AIHA, ELAP, or any agency of the U.S. Government.

BEM is accredited with the Environmental Laboratory Accreditation Program (ELAP) under Certificate Number 3013.

BEM participates in the American Industrial Hygiene Association's (AIHA) Bulk Asbestos Proficiency Analytical Testing Program (BAPAT) under Laboratory Identification Number 221538 and the National Voluntary Laboratory Accreditation Program's (NVLAP) Bulk Asbestos Proficiency Test under Lab Code 901038.

NVLAP Lab Code 600260

Report Authorized By

Danielle Carrier, Laboratory Director

Date

Analyzed By

03/06/2023

Carly Strickland

Date

ATTACHMENT C

SITE DRAWING

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