Revised Asbestos & Lead Building Inspection/Survey

Grass Valley Charter School 225 S. Auburn Street Grass Valley, CA 95945

Presented to:

Brian Martinez

Grass Valley School District 10840 Gilmore Way Grass Valley, CA 94545

Inspection Date:

January 2, 2019

Conducted By:

Michael J. Lee
Certified Asbestos Consultant
Certified Lead Inspector/Assessor
Registered Environmental Property Assessor

National Analytical Laboratories, Inc.

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Office: (916) 361-0555 | Fax: (916) 361-0540 E-Mail: NAL1@NAL1.com | Web Page: www.NAL1.com Brian Martinez Grass Valley School District 10840 Gilmore Way Grass Valley, CA 94545

RE: Asbestos & Lead Building Inspection/Survey -

Grass Valley Charter School 225 S. Auburn Street Grass Valley, CA 95945

Dear Mr. Martinez,

The following report is in regards to the building inspection conducted at the above-listed address. Of the sixty (60) suspected asbestos containing samples collected eleven (11) were found to contain asbestos containing construction materials (ACCM). Of the eleven (11) suspected lead containing samples collected seven (7) were found to contain Lead Containing Material (LCM), Lead Based Paint (LBP). Michael J. Lee, Certified Asbestos Consultant, Certified Lead Inspector/Assessor and Registered Environmental Property Assessor for National Analytical Laboratories, Inc. (N.A.L.), conducted the inspection on January 2, 2019.

This report is designed for direct application to a window and roof renovation.

SUMMARY OF FINDINGS -

Based on the sample results,

For the window project,

Gray Caulking and the Panel Transite, were found to contain ACCM.

The beige paint on the Wood Window Sill and the Plaster interior wall (interior was found to contain LBP levels above the OSHA Limit of Detection

For the roof project,

The Black-Silver Roof Mastic, the, the Gray-Black Sealant Flashing, the Silver Paint, were found to contain ACCM

The Floor Tile, the Thin Floor Tile and the White Floor Tile were found to contain ACCM.

The samples from the Beige Paint, Blue Paint, Gray Paint and Tan-Beige Paint surfaces were found to contain LCM/LBP levels above the OSHA Limit of Detection. Therefore, the employer must ensure that the worker is properly trained in accordance with Title 8 (Cal/OSHA 8 CCR 1532 (1) (2) and shall produce evidence that the worker is not being exposed above the Action Level (AL) and/or the Permissible Exposure Limit (PEL). In the event that no current data is readily available for the worker(s), then the employer shall conclude that the worker is being exposed above the PEL. This SHALL trigger the employer to provide advanced training and certifications for the employees working with LCM/LBP.

SECTION I: ASBESTOS INSPECTION -

The inspection was completed according to the EPA's Asbestos Containing Building Materials (ACBM) In-Schools Rule; 40 CFR 763.85 (Inspection and Re-Inspection). Currently, EPA regulations classify ACBM as materials containing more than 1-percent (1%) of asbestos. Cal-OSHA currently regulates asbestos to 1/10th of 1% (0.1%) and requires that a certified asbestos worker conduct this work.

Upon completion of the visual inspection, the suspect asbestos bulk sample materials were collected in accordance with EPA and OSHA protocol. They were placed into new, airtight, plastic bags, sealed, and identified with unique identification numbers. The bulk samples were transported to the laboratory under the chain of custody protocol for analysis.

No destructive, only renovation sampling was conducted during the site visit, in the event that future renovation and/or demolition work reveals any unforeseen suspect materials; the contractor shall contact the project manager for further testing.

LA Testing, Inc. (EMSL) in Huntington Beach, CA, analyzed the bulk suspect asbestos containing samples utilizing the Polarized Light Microscopy (PLM) Method. National Voluntary Laboratory Accreditation Program (NVLAP) Certification #101384-0 and California Environmental Laboratory Accreditation Program (CAELAP) Certification #14, certifies LA Testing.

Although not all the rooms or materials throughout the site were sampled, the like materials that were not tested will be treated as homogeneous to the materials that were tested and will be considered as containing ACCM or Non-ACCM in accordance to the results.

The location and results of suspect samples found to contain ACCM are as follows:

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Sample ID#	Material	Location	Category	Results
225-18B	Floor Tile	Quad C, Room 12, Northwest Floor at	I	2% Chrysotile
		Hatch, Under Carpet (~7000 sf)		
225-19A	White Floor Tile	Quad C, Room 14, Northeast Floor, Under Carpet (Do not analyze Carpet	I	2% Chrysotile
		Mastic)		

Sample ID#	Material	Location	Category	Results
225-20B	White Floor Tile	Quad C, Room 15, Utility Room, Bottom Layer	1	*Trace,<1% Chrysotile
225-21A	Thin Floor Tile	Quad C, Room 15, South Floor Under Carpet - Do not analyze Carpet Glue	I	*Trace,<1% Chrysotile
225-31	Panel Transite	Quad D, East Courtyard Window Blank at Rm 22 (-600 sf)	I	10% Chrysotile
225-36	Black-Silver Roof Mastic	Quad B, Roof, West Window Vent (~75 sf)	Ι	4% Chrysotile
225-40	Black-Silver Roof Mastic	Quad B, Roof, West Area, East Vent	Ι	3% Chrysotile
225-42	Silver Paint	Quad B, Roof, East Metal Vent (-200 sf)	I	3% Chrysotile
225-43	Silver Paint	Quad C, Center Metal Vent (-50 sf)	I	3% Chrysotile
225-44	Gray Caulking	Quad D, Courtyard, East Window Bay	I	2% Chrysotile
225-45	Gray-Black Sealant Flashing	Quad D, Courtyard, East Window Bay (-50 sf)	I	4% Chrysotile

sf = Square Feet; Category I & II are Non-friable/Non-hazardous Materials.

The Gray-Black Sealant Flashing, Gray Caulking, Silver Paint, Black-Silver Roof Mastic, Panel Transite, White Floor Tile and Floor Tile are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

The Thin Floor Tile and White Floor Tile are to be considered homogeneous and treated as containing Trace <1% Chrysotile. A certified asbestos abatement contractor must be retained to remove the above materials containing the Trace (<1%) amount prior to any renovation or demolition work being completed at the site. During the removal of the materials, the debris will be placed into an open top waste bin. The bin will have "Asbestos Hazard" signs posted around the perimeter of the waste bin. Upon completion of the removal process, the bin will be covered, the signs will be removed and the debris will be disposed of as general construction debris at a non-regulated waste facility.

The following samples were **non-asbestos containing** materials:

Sample ID#	Material	Location	Results
225-1	Texture	Quad D, South Hallway at Girls Restroom (-1500 sf)	None Detected
225-2	Texture	Quad C, Hallway, South Wall at West Exit	None Detected
225-3	Plaster	Quad A, Office 49, North Wall (-3000 sf)	None Detected
225-4	Plaster	Quad B, Room 6, Upper Ceiling Area	None Detected
225-5	Plaster	Quad C, Room 15, Utility, South Wall	None Detected
225-6	Plaster	Quad A, Janitors Closet, East Wall	None Detected
225-7	Plaster	Quad D, Room 17, Entryway	None Detected
225-8	2'x4' Small Fissured Acoustical Ceiling Tile	Quad B, Room 7, Northwest Ceiling (-10000 sf)	None Detected

Sample ID#	Material	Location	Results
225-9	2'x4' Small Fissured	Quad D, Room 20, Ceiling	None Detected
	Acoustical Ceiling Tile	, , , , ,	
225-10A	Gray Pebble Linoleum	Quad A, Office 49	None Detected
225-10B	Yellow Linoleum Mastic	Quad A, Office 49	None Detected
225-11A	Gray Linoleum	Quad B, Staff Room 1 Kitchen	None Detected
225-11B	Yellow Linoleum Mastic	Quad B, Staff Room 1 Kitchen	None Detected
225-12A	Gray Pebble Linoleum	Quad B, Room 6, Northwest Floor - Top Layer	None Detected
225-12B	Yellow Linoleum Mastic	Quad B, Room 6, Northwest Floor - Top Layer	None Detected
225-12C	Linoleum	Quad B, Room 6, Northwest Floor - Bottom Layer	None Detected
225-12D	Yellow Linoleum Mastic	Quad B, Room 6, Northwest Floor - Bottom Layer	None Detected
225-13A	Sand Pattern Linoleum	Portable 29, North Floor at Sink	None Detected
225-13B	Yellow Linoleum Mastic	Portable 29, North Floor at Sink	None Detected
225-14A	Beige Pebble Pattern Linoleum	Portable 32, North Floor at Sink	None Detected
225-14C	Yellow Linoleum Mastic	Portable 32, North Floor at Sink	None Detected
225-15A	Black Vapor Barrier Felt	Quad B, Room 8, Under Carpet	None Detected
225-15B	Yellow Carpet Mastic	Quad B, Room 8, Under Carpet	None Detected
225-16	Background Vapor Barrier Felt	Quad B, Room 7, Northwest Floor, Under Carpet	None Detected
225-17	Black Vapor Barrier Felt	Quad B, Staff Room 1, Northeast Corner Under Carpet	None Detected
225-18A	Yellow Carpet Mastic	Quad C, Room 12, Northwest Floor at Hatch, Under Carpet	None Detected
225-18C	Black Floor Tile Mastic	Quad C, Room 12, Northwest Floor at Hatch, Under Carpet	None Detected
225-19B	Brown Floor Tile Mastic	Quad C, Room 14, Northeast Floor, Under Carpet	None Detected
225-20A	Beige Linoleum	Quad C, Room 15, Utility Room	None Detected
225-20C	Brown Floor Tile Mastic	Quad C, Room 15, Utility Room, Bottom Layer	None Detected
225-21B	Black Vapor Barrier Felt	Quad C, Room 15, South Floor Under Carpet	None Detected
225-22A	12" Crème With Blue Streaks Floor Tile	Quad B, Gym, Room 5, Northeast Floor	None Detected
225-22B	Yellow Floor Tile Mastic	Quad B, Gym, Room 5, Northeast Floor	None Detected
225-23	Yellow Carpet Mastic	Quad D, Room 17, Northwest Floor	None Detected
225-24	Yellow Carpet Mastic	Portable 29, Northeast Floor, Under Carpet	None Detected
225-25	Yellow Carpet Mastic	Quad A, Room 1, Southeast Floor, Under Carpet	None Detected
225-26	Yellow FRP Mastic	Quad A, Boys Restroom, South Wall (-75 sf)	None Detected
225-27	Black Sink Coating	Portable 29, Sink at Cabinet (-35 sf)	None Detected
225-28	Cream Cove Base Mastic	Quad D, Room 17, Northwest Wall	None Detected
225-29	Cream Cove Base Mastic	Quad B, Gym, Room 5, West Wall	None Detected
225-30	Cream Cove Base Mastic	Portable 32, South Wall	None Detected
225-32	Gray Composition Rolled Roofing	Quad D, Roof, Southeast Corner	None Detected

Sample ID#	Material	Location	Results
225-33	Gray Composition Rolled Roofing	Quad C, Roof, West area at HVAC Unit	None Detected
225-34	Gray-White Composition Rolled Roofing	Quad A, Roof, Northeast Corner	None Detected
225-35	Built Up Roofing Tar and Gravel	Quad B, Roof, South Center Area (-800 sf)	None Detected
225-37	White-Black Roof Mastic	Quad D, Roof, East Unit-Penetrations	None Detected
225-38	Gray Roof Mastic	Quad C, Roof, West Unit at Penetrations	None Detected
225-39	White-Black Roof Mastic	Quad D, Southeast Unit Curb	None Detected
225-41	Black Cap Sheet	Quad B, Roof, South Tar and Gravel Roof, South Parapet Wall	None Detected

sf = Square Feet

ASBESTOS RECOMMENDATION -

Federal and state regulations require that anyone disturbing asbestos containing materials are properly trained certified and have the required respiratory protection and medical surveillance.

N.A.L recommends that a certified asbestos abatement contractor be retained to remove the non-friable and trace materials prior to any scheduled renovation/demolition work being completed at the site. Prior to the work process starting a work plan or specifications in regards to the abatement process should be completed and distributed to the abatement contractors during the job walk at the site.

On-Site Observation should be conducted by N.A.L.'s Certified Asbestos Consultant or Certified Site Surveillance Technician to verify that the work plan/specification is being followed. This will verify that during the abatement work the outside air was clean. Once a certified asbestos contractor has removed the ACCM, following EPA and OSHA requirements; a visual inspection and air clearance sampling should be completed. Clearances will confirm that the general contractor can reoccupy the work area(s), without concern for exposure to asbestos airborne fibers to their employees thus allowing the renovation or demolition work to be completed by the general contractor.

SECTION II: LEAD INSPECTION -

The lead suspect samples were collected according to the Housing Urban Development (HUD) Guidelines, the Environmental Protection Agency (EPA) and California Public Health Department (formally DHS), who regulate and require the abatement or in-place management of LCM/LBP hazards equal to or greater than 1.0 milligram per square centimeter (1.0 mg/cm2) of lead by XRF Analysis or more than 0.5% lead by weight by laboratory flame atomic absorption. The following regulation shall be adhered to because OSHA considers all surfaces to contain

lead: OSHA's 29 CFR 1926.62, California Occupational Safety and Health Standard, Title 8 (Cal/OSHA 8 CCR 1532.1).

Upon completion of the visual inspection, suspect painted finishes and/or materials were sampled for potential lead content, in accordance with EPA and OSHA protocol. They were labeled with a unique identification number and analyzed.

LA Testing, Inc. (EMSL) in Huntington Beach, CA, utilizing the SW-846-3050B*/7000B method analyzed the suspect LCM samples. National Voluntary Laboratory Accreditation Program (NVLAP) Certification #101650 and California Environmental Laboratory Accreditation Program (CAELAP) Certification #1406, certifies EMSL.

Since the laboratory results are reported by weight percent, during the collection of the suspect LCM/LBP samples the paint must be removed down to, but not including, the bare substrate (wood, metal, etc.). Inclusion of the any amount of the substrate material in the paint sample will dilute the sample result(s).

Once the determination is made on where the LCM/LBP is located, the In-place Management or the Abatement of the LCM/LBP can commence. If the In-Place Management method is to be used, prior to the repainting of the effected surface areas, the loose flaky paint must be removed until the remaining paint adheres smoothly to the substrate. Once this task is completed, the surface area can be repainted without the possibility of paint being dislodged and falling to the floor or ground areas.

If the Abatement method of all surfaces is to be completed, then the debris and any loose flaky paint must be bagged or burrito wrapped prior to the removal of the debris from the work area(s) and subsequently the site. Because the paint samples listed below were found to contain LCM/LBP, all areas where the LCM/LBP will be disturbed will require abatement, encapsulation, and/or prep work by a certified lead worker.

Although not all the rooms or materials (non-suspect) were sampled, the like materials that were not tested and their results will be treated as homogeneous and the materials will be treated as containing LCM/LBP throughout the site.

The locations and results of the suspect samples found to be LCM/LBP are as follows:

			Concentration
Sample ID#	Material	Location	% By Weight
225-8L	Gray Paint	Quad C, Southwest Ladies Room, East Plaster Wall	1.7% -LBP
225-5L	Tan-Beige Paint	Quad A, Janitors Closet, Plaster Wall System	0.17% -LCM
225-6L	Beige Paint	Quad D, Room 17, Plaster Wall System	1.1% -LBP
225-7L	Beige Paint	Quad C, Room 11, Wood Window Sill System	0.95% -LBP
225-3L	Beige Paint	Quad D, Girls Restroom, Plaster Wall System	1.6% -LBP
225-4L	Blue Paint	Quad B, North Hallway Wall	0.96% -LBP
225-9L	Beige Paint	Quad D, Room 17, Wood Window Sill	0.51% -LBP

Prior to the demolition work being completed and/or the transporting of the debris from the site, Health and Safety Code 25157.8 (AB 2784 National Resources) requires that all lead debris be sampled for Waste Characterization. This will assist the Contractor in making a determination of whether or not the material is to be considered Hazardous or Non-Hazardous Lead waste or general construction debris. The sequence of testing to be completed by the Contractor is as follows:

- Total Threshold Limit concentration (TTLC) with a result of 50 mg/kg or more but less than 1,000 mg/kg of lead must be retested using the Soluble Threshold Limit concentration (STLC) method;
- A STLC result of 5.0 mg/L or greater is considered California Hazardous Waste;
- Total Characteristic Leaching Procedure (TCLP) testing shall only be accomplished when approved by the Owners Representative; This procedure shall be generally reserved for out-of-state shipments; and A TCLP result of 5.0 mg/L or more deems the waste Federal RCRA materials; and
- The California hazardous waste threshold for total lead using STLC is 5 mg/L and
- Lead paint that is intact on a surface does not permit the material to be classed as non-hazardous. Waste profiling shall be accomplished if the paint contains more than 350 ppm by Flame AAS. Exception: Metals that are coated with paint are to be recycled.

The following painted surfaces were **found to be less than** (<) the OSHA's Limit of Detection:

Sample ID#	Material	Location	Concentration % By Weight
225-1L	4" White Ceramic Tile	Quad B, Boys Restroom, Room 144, Wall	0.018%
		System	
225-2L	Blue-Green Ceramic Tile	Quad A, Boys Restroom, Behind FRP	0.016%
225-10L	Yellow Paint	Quad D, South Hallway at Rm 17	0.0086%
225-11L	White Paint	Quad D, Courtyard, East Metal Window System	<0.018%

LEAD RECOMMENDATION:

In order to stabilize the current lead conditions, NAL recommends Lead Certified Workers certified by The California Department of Public Health or/a EPA certified Renovator, Repair and Painting (RRP) designation, conduct in-place management work of the LCM/LBP surfaces scheduled for renovation/demolition. Once the abatement, in-place management, and/or prep work is completed and the areas are stabilized, the existing surfaces will be in good condition and not create a health or safety concern to the workers conducting the general construction work at the site. A Scope of Work and/or specifications should be utilized to conduct the lead work at the site.

Included at the end of this report are the laboratory analytical results, chain of custody form(s) and site map. If you have any questions regarding this report or if we can be of further assistance, please contact our office.

Reviewed, conducted and submitted by:

Asbestos & Lead Building Inspection/Survey 225 S. Auburn Street, Grass Valley, CA 95945 January 9, 2019 Page 9 of 9

Michael Lee Certified Asbestos Consultant DOSH# 06-4047 Certified Lead Inspector/Assessor CDPH# 10531 Registered Environmental Property Assessor REPA# 716352750