

NorBay Consulting

LOGICAL

ENVIRONMENTAL

SOLUTIONS

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June 24, 2019

Mr. Jamie Ferranti
Greystone West Company
621 W. Spain Street
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**SUBJECT: PRE-RENOVATION HAZARDOUS MATERIALS INSPECTION
WALNUT CREEK INTERMEDIATE SCHOOL
WALNUT CREEK, CALIFORNIA**

Dear Mr. Ferranti:

NorBay Consulting is pleased to provide the analytical results from the pre-renovation hazardous materials inspection conducted on the campus of Walnut Creek Intermediate School located in Walnut Creek, California.

The inspection included the visual observation of suspect asbestos containing building materials within the path of construction, collection of suspect building materials to determine asbestos content, if any, laboratory analysis, the collection of lead in paint readings utilizing a RMD direct reading instrument, visual inspection for mercury containing thermostats and florescent light tubes, visual inspection for polychlorinated biphenyls (PCB) light ballasts and generation of a final report.

NorBay Consulting appreciates the opportunity to provide you with these services. If you have any questions regarding this report or if you require additional information please do not hesitate to contact me at (415) 507-9786.

Respectfully,
NORBAY CONSULTING

Bob Gerhold

Bob Gerhold
Certified Asbestos Consultant # 92-0157
CDPH Lead Inspector/Assessor I2108

EXECUTIVE SUMMARY

NorBay Consulting performed a pre-renovation hazardous materials inspection on the campus of the Walnut Creek Intermediate School in Walnut Creek, California. Mr. Bob Gerhold, Cal-OSHA Certified Asbestos Consultant #92-0157 and CDPH Lead Inspector/Assessor #2108, Mr. Greg Marszal, Cal-OSHA Site Surveillance Technician #96-1975 and Mr. Mike Gerhold, EPA Building Inspector #44537 and CDPH Lead Sampling Technician #31696 performed the inspection on June 10th and 11th, 2019.

This Executive Summary is provided solely for the purpose of overview. Any party who relies on this report must read the entire report. The Executive Summary may have omitted important details, anyone of which could be crucial to the proper understanding and risk assessment of the subject matter.

A total of one hundred and seventy (170) samples of suspect asbestos containing building materials were collected during the inspection. Upon analysis by Polarized Light Microscopy (PLM) the following material(s) were found to contain varying percentages of asbestiform minerals or are materials known to contain asbestos.

- ◆ Flooring mastic under non-asbestos containing 12" blue vinyl floor tile in the server room of the Administration Building;
- ◆ Drywall/taping mud in the server room of the Administration Building;
- ◆ 9" vinyl floor tile and mastic (under carpet) in various classrooms of the 100 Wing;
- ◆ 9" vinyl floor tile and mastic (under carpet) in various classrooms of the 200 Wing;
- ◆ Bottom layer of floor tile and mastic under 12" vinyl floor tile in classroom 205 of the 200 Wing;
- ◆ 9" vinyl floor tile and mastic (under carpet) in various classrooms of the 400 Wing;
- ◆ Bottom layer of floor tile and mastic under 12" vinyl floor tile in various classroom of the 400 Wing;
- ◆ Drywall/taping mud throughout the 400 Wing;
- ◆ Drywall/taping mud throughout the Multi-Purpose Room;
- ◆ Textured drywall/taping mud in the Multi-Purpose Room boy's restroom;
- ◆ Asbestos cement "transite" flue pipe in room 602 (music office) of the 600 Wing;
- ◆ Asbestos cement "transite" panels (interior & exterior) on the Multi-Purpose Room, 100 Wing, 200 Wing and the Administration Building.

A total of four hundred and forty-two (442) readings were collected of interior/exterior painted/coated surfaces during the inspection. In addition, six (6) calibration readings were also collected. For this report lead based paint includes readings ≥ 1.0 mg/cm², lead-containing paint includes readings ≥ 0.1 to ≤ 1.0 mg/cm² and no lead detected includes readings of 0.0 mg/cm². It is extremely important to understand that XRF readings, which have a value of 0.0 mg/cm², do not necessarily mean there is "no lead present" but rather the level is below what the instrument can read.

Lead based paint/glazing was located on the following components:

- ◆ Exterior gray metal overhang posts on the 100 Wing, Administration Building and 200 Wing,
- ◆ Exterior gray wooden header on Wing 100;

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- ◆ Interior white wooden window and door systems on the 100 Wing;
- ◆ Interior white wooden door frame to IT room in the Administration Building;
- ◆ Interior white wooden door and window systems in the 200 Wing;
- ◆ Interior red ceramic wall (lower) in both Boy's and Girl's restrooms in the 400 Wing;

In addition, certain components, both interior and exterior were found to be coated with detectable levels of lead. Disturbance of these components would also be subject to Cal-OSHA Lead in Construction standards.

Florescent light tubes suspected of containing low levels of mercury, cadmium and antimony were observed throughout the campus however no suspect mercury containing thermostats were observed.

A more detailed presentation of procedures and findings is presented in the body of this report. Also included is a discussion of recommendations and regulatory considerations.

ASBESTOS SURVEY PROCEDURES

Homogeneous areas of materials, which were suspected of containing asbestos were identified. A homogeneous area, for bulk sampling purposes, is one that seems by texture, color and wear to be uniform and applied during the same general time period. After the homogeneous areas had been identified, representative bulk sample(s) are collected for laboratory analysis. Because asbestos-containing building materials have compositional variability, it is possible to obtain different laboratory results for samples from the same homogeneous area. Therefore, a homogeneous area with at least one positive sample for will result in the entire homogeneous area being designated as an asbestos containing material.

The sampling strategy was partially based on guidelines established by the Environmental Protection Agency (EPA) for school buildings (40 CFR Part 763, AHERA) which require that samples be collected from each homogeneous area of suspected ACM. Upon completion of the inspection and bulk sampling, the samples were delivered under chain of custody protocol to Forensic Analytical of Hayward, California for analysis by Polarized Light Microscopy (PLM).

SAMPLE ANALYSIS

Bulk samples were examined by Polarized Light Microscopy (PLM) in accordance with EPA Test Method 600/R-93/116, "Method for the Determination of Asbestos in Bulk Building Materials". The percentage of asbestos is determined by visual estimation. Laboratory results are reported based on the percentage of asbestiform minerals identified within each sample layer. The lower limit of reliable detection by PLM is 1% by volume. When asbestos or other minerals are observed in concentrations believed to be less than the reliable detection limit (less than 1%) the results are usually indicated as TRACE. Upon analysis the analytical results are compared to government agency standards. Currently, both the California Occupational Safety and Health Administration (Cal-OSHA) and the Environmental Protection Agency (EPA) define material with contains more than one percent asbestos to be an asbestos containing material (ACM).

In addition, Cal-OSHA defines any manufactured construction material containing more than 0.1% by weight as asbestos containing construction materials (ACCM). Cal-OSHA also requires notification and registration of the contractor when disturbing materials with more than one-tenth

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of one percent and regulates worker protection whenever materials containing any detectable levels of asbestos are to be disturbed.

RESULTS

Analytical results can be found in the following table

Sample ID	Material	Location	Results
Admin-VFT-1-1	12" vinyl floor tile, blue with mastic	Admin Building, server room	< 1% asbestos in mastic
Admin-VFT-1-2	12" vinyl floor tile. Blue with mastic	Admin Building, attendance area	No Asbestos Detected
Admin-DWTM-1	Drywall/taping mud	Admin Building, storage room in hallway	No Asbestos Detected
Admin-DWTM-2	Drywall/taping mud	Admin Building, hallway	No Asbestos Detected
Admin-DWTM-3	Drywall/taping mud	Admin Building, math office	No Asbestos Detected
Admin-DWTM-4	Drywall/taping mud	Admin. Building, PTA office	No Asbestos Detected
Admin-DWTM-5	Drywall/taping mud	Admin. Building, server room	2% asbestos in drywall
Admin-BBM-1	Baseboard mastic	Admin. Building, PTA office	No Asbestos Detected
Admin-BBM-2	Baseboard mastic	Admin. Building, server room	No Asbestos Detected
Admin-ACT-1	1' x 1' acoustical ceiling tile	Admin. Building copy room	No Asbestos Detected
Admin-ACT-2	1' x 1' acoustical ceiling tile	Admin. Building, PTA office	No Asbestos Detected
100-BBM-1	Baseboard mastic	100 Wing, room 106	No Asbestos Detected
100-BBM-2	Baseboard mastic	100 Wing, counselor's office	No Asbestos Detected
100-SU-1	Black sink undercoating	100 Wing, staff room	No Asbestos Detected
100-ACT-1-1	1'x1' acoustical ceiling tile	100 Wing, room 103	No Asbestos Detected
100-ACT-1-2	1'x1' acoustical ceiling tile	100 Wing, room 106	No Asbestos Detected
100-ACT-1-3	1'x1' acoustical ceiling tile	100 Wing, staff room	No Asbestos Detected
100-ACT-2-1&2	2'x2' acoustical ceiling tile	100 Wing, counselor's office	No Asbestos Detected
100-AWT-1 & 2	1' x 1' acoustical wall tile and brown glue	100 Wing, WCEF room	No Asbestos Detected
100-PB-1	Pressboard wall system	100 Wing, room 109	No Asbestos Detected

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Sample ID	Material	Location	Results
100-PB-2	Pressboard wall system	100 Wing, room 103	No Asbestos Detected
100-PB-3	Pressboard wall system	100 Wing, room 106	No Asbestos Detected
100-BBM-1	Baseboard mastic	100 Wing, staff room	No Asbestos Detected
100-BBM-2	Baseboard mastic	100 Wing, room 103	No Asbestos Detected
100-TB-1	Tack board wall system with brown glue	100 Wing, room 103	No Asbestos Detected
100-TB-2	Tack board wall system with brown glue	100 Wing, room 106	No Asbestos Detected
100-TB-3	Tack board wall system with brown glue	100 Wing, room 109	No Asbestos Detected
100-DWTM-1	Drywall/taping mud	100 Wing, staff room	No Asbestos Detected
100-DWTM-2	Drywall/taping mud	100 Wing, counselor's office, reception area	No Asbestos Detected
100-DWTM-3	Drywall/taping mud	100 Wing, counselor's office, conference room	No Asbestos Detected
100-TDWTM-1	Textured drywall/taping mud (soffit)	100 Wing, room 106	No Asbestos Detected
100-TDWTM-2	Textured drywall/taping mud (soffit)	100 Wing, room 109	No Asbestos Detected
100-TDWTM-3	Textured drywall/taping mud (soffit)	100 Wing, room 103	No Asbestos Detected
100-VFT-1-1	9" vinyl floor tile, tan with mastic (under carpet)	100 Wing, room 102	5% in tile
100-VFT-1-2	9" vinyl floor tile, tan with mastic (under carpet)	100 Wing, room 103	Positive per previous PLM
100-VFT-1-3	9" vinyl floor tile, tan with mastic (under carpet)	100 Wing, room 106	Positive per previous PLM
100-VFT-2-1	12" vinyl floor tile, green with mastic	100 Wing, room 109	No Asbestos Detected
100-VFT-2-2	12" vinyl floor tile, green with mastic	100 Wing, room 103	No Asbestos Detected
100-VFT-2-3	12" vinyl floor tile, green with mastic	100 Wing, staff room	No Asbestos Detected
100-VFT-2-4	12" vinyl floor tile, green with mastic	100 Wing, room 106	No Asbestos Detected
200-TDWTM-1	Textured drywall/taping mud (soffit)	200 Wing, room 204	No Asbestos Detected
200-TDWTM-2	Textured drywall/taping mud (soffit)	200 Wing, room 209	No Asbestos Detected
200-ACT-1	1' x 1' acoustical ceiling tile	200 Wing, room 209	No Asbestos Detected
200-ACT-2	1' x 1' acoustical ceiling tile	200 Wing, room 204	No Asbestos Detected
200-BBM-1	Base coving and mastic	200 Wing, room 204	No Asbestos Detected

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Sample ID	Material	Location	Results
200-BBM-2	Baseboard mastic	200 Wing, room 209	No Asbestos Detected
200-PB-1	Pressboard wall system	200 Wing, room 209	No Asbestos Detected
200-PB-2	Pressboard wall system	200 Wing, room 204	No Asbestos Detected
200-TBM-1	Tackboard wall system with mastic	200 Wing, room 204	No Asbestos Detected
200-TBM-2	Tackboard wall system with mastic	200 Wing, room 209	No Asbestos Detected
200-VFT-1-1	9" vinyl floor tile, tan with mastic under carpet	200 Wing, room 205	5% in tile, 2% in mastic
200-VFT-1-2	9" vinyl floor tile, tan with mastic under carpet	200 Wing, room 204	Positive per previous PLM
200-VFT-2-1	12" vinyl floor tile, green with mastic	200 Wing, room 212	No Asbestos Detected
200-VFT-2-2	12" vinyl floor tile, green with mastic	200 Wing, room 205	5% in lower layer of tile
200-VFT-2-3	12" vinyl floor tile, green with mastic	200 Wing, room 204	No Asbestos Detected
301-304-DWTM-1	Drywall/taping mud	301-304 Building, room 304	No Asbestos Detected
301-304-DWTM-2	Drywall/taping mud	301-304 Building, center area	No Asbestos Detected
301-304-DWTM-3	Drywall/taping mud	301-304 Building, room 302	No Asbestos Detected
301-304-VFT-1-1	12" vinyl floor tile, green with mastic	301-304 Building, center area	No Asbestos Detected
301-304-VFT-1-2	12" vinyl floor tile, green with mastic	301-304 Building, room 304	No Asbestos Detected
301-304-ACT-1	1'x1' acoustical ceiling tile with mastic	301-304 Building, room 302	No Asbestos Detected
301-304-ACT-2	1'x1' acoustical ceiling tile with mastic	301-304 Building, room 303	No Asbestos Detected
301-304-PB-1	Pressboard wall system	301-304 Building, room 302	No Asbestos Detected
301-304-PB-2	Pressboard wall system	301-304 Building, room 304	No Asbestos Detected
301-304-SU-1	Black sink undercoating	301-304 Building, room 303	No Asbestos Detected
301-304-SU-2	Black sink undercoating	301-304 Building, room 302	No Asbestos Detected
301-304-BBM-1	Baseboard mastic	301-304 Building, room 304	No Asbestos Detected
301-304-BBM-2	Baseboard mastic	301-304 Building, center area	No Asbestos Detected
305/306-SU-1	Black sink undercoating	305-306 Building, room 306	No Asbestos Detected
305/306-ACP-1	2'x4' acoustical ceiling panels	305-306 Building, room 306	No Asbestos Detected

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Sample ID	Material	Location	Results
305/306-ACP-2	2'x4' acoustical ceiling panels	305-306 Building, room 305	No Asbestos Detected
305/306-DWPG-1	Drywall with pressboard glue	305-306 Building, room 306	No Asbestos detected
305/306-DWPG-2	Drywall with pressboard glue	305-306 Building, room 305	No Asbestos Detected
305/306-PB-1	Pressboard wall system	305-306 Building, room 306	No Asbestos Detected
305/306-PB-2	Pressboard wall system	305-306 Building, room 305	No Asbestos Detected
305/306-BBM-1	Baseboard mastic	305-306 Building, room 306	No Asbestos Detected
305/306-BBM-2	Baseboard mastic	305-306 Building, room 305	No Asbestos Detected
305/306-VFT-1-1	12" vinyl floor tile, white with mastic	305-306 Building, room 306	No Asbestos Detected
305/306-VFT-1-2	12" vinyl floor tile, white with mastic	305-306 Building, room 305	No Asbestos Detected
307-310-ACP-1	2' x 4' acoustical ceiling panels	307-310 Building, room 309	No Asbestos Detected
307-310-ACP-2	2'x4' acoustical ceiling panels	307-310 Building, room 307	No Asbestos Detected
307-310-SU-1	Black sink undercoating	307-310 Building, room 307	No Asbestos Detected
307-310-SU-2	Black sink undercoating	307-310 Building, room 310	No Asbestos Detected
307-310-PB-1	Pressboard wall system	307-310 Building, room 310	No Asbestos Detected
307-310-PB-2	Pressboard wall system	307-310 Building, room 309	No Asbestos Detected
307-310-VFT-1-1	12" vinyl floor tile, green with mastic	307-310 Buildings, room 309	No Asbestos Detected
307-310-VFT-1-2	12" vinyl floor tile, green with mastic	307-310 Building, room 307	No Asbestos Detected
307-310-DWPG-1	Drywall with pressboard glue	307-310 Building, room 310	No Asbestos Detected
307-310-DWPG-2	Drywall with pressboard glue	307-310 Buildings, room 309	No Asbestos Detected
307-310-BBM-1	Baseboard mastic	307-310 Building, room 309	No Asbestos Detected
307-310-BBM-2	Baseboard mastic	307-310 Building, room 307	No Asbestos Detected
400-Text-1	Wall texture	400 Wing, room 402	No Asbestos Detected
400-Text-2	Wall texture	400 Wing, room 402	No Asbestos Detected
400-Plaster-1	Plaster	400 Wing, boy's restroom	No Asbestos Detected

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Sample ID	Material	Location	Results
400-BBM-1	Baseboard mastic	400 Wing, room 403	No Asbestos Detected
400-BBM-2	Baseboard mastic	400 Wing, hallway	No Asbestos Detected
400-VFT-1-1	9' vinyl floor tile with mastic under carpet	400 Wing, room 403	5% in tile 5% in mastic
400-ACT-1	1'x1' acoustical ceiling tile	400 Wing, room 410	No Asbestos Detected
400-ACT-2	1'x1' acoustical ceiling tile	400 Wing, room 406	No Asbestos Detected
400-MLF-1	Multi-layered flooring	400 Wing, room 406	5% in tile 5% in mastic
400-MLF-2	Multi-layered flooring	400 Wing, room 410	5% in tile, 5% in mastic
400-MLF-3	Multi-layered flooring	400 Wing, uni-sex restroom	No Asbestos Detected
400-MLF-4	Multi-layered flooring	400 Wing, staff uni-sex restroom	No Asbestos Detected
400-DWTM-1	Drywall/taping mud	400 Wing, room 406	< 1% asbestos Per PLM
400-DWTM-2	Drywall/taping mud	400 Wing, above hallway ceiling	No Asbestos Detected
400-DWTM-3	Drywall/taping mud	400 Wing, psych, conference room	No Asbestos Detected
400-DWTM-4	Drywall/taping mud	400 Wing, psych, office	< 1% asbestos per PLM
400-DWTM-5	Drywall/taping mud	400 Wing, hallway, above ceiling	<1% asbestos per PLM
MPR-BBM-1	Baseboard mastic	Multi-purpose room	No Asbestos Detected
MPR-VFT-1-1&2	Wood plank pattern vinyl floor tile with glue	Multi-purpose room, floor	No Asbestos Detected
MPR-VFT-2-1	12" aqua vinyl floor tile with mastic	Multi-purpose room, custodial closet near rm 601	No Asbestos Detected
MPR-VFT-2-2	12" aqua vinyl floor tile with mastic	Multi-purpose room, room 603	No Asbestos Detected
MPR-VFT-2-3	12" aqua vinyl floor tile with mastic	Multi-purpose room, room 602	No Asbestos Detected
MPR-INS-1-&2	Fiberglass insulation with black cloth	Multi-purpose room, above stage	No Asbestos Detected
MPR-Mastic-1-1&2	Mastic for holding on insulation	Multi-purpose room, above stage	No Asbestos Detected
MPR-Mastic-2-1	Mastic	Multi-purpose room, hallway ceiling outside room 601	No Asbestos Detected
MPR-Mastic-2-2	Mastic	Multi-purpose room, hallway ceiling outside MPR	No Asbestos Detected
MPR-Mastic-2-3	Mastic	Multi-purpose room, hallway ceiling outside room 601	No Asbestos Detected
MPR-ACT-1-1	1'x1' acoustical ceiling tile with fissures/pinholes & glue	Multi-purpose room, room 603	No Asbestos Detected

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Sample ID	Material	Location	Results
MPR-ACT-1-2	1'x1' acoustical ceiling tile with fissures/pinholes & glue	Multi-purpose room, room 602	No Asbestos Detected
MPR-ACT-2-1-3	1'x1' acoustical ceiling tile with fissures	Multi-purpose room, hallway outside MPR	No Asbestos Detected
MPR-DWTM-1-2	Drywall/taping mud	Multi-purpose room, above stage	<1% asbestos per PLM
MPR-DWTM-3	Drywall/taping mud	Multi-purpose room, music office	< 1% asbestos per PLM
MPR-DWTM-4	Drywall/taping mud.	Multi-purpose room, hallway ceiling outside MPR	No Asbestos Detected
MPR-DWTM-5	Drywall/taping mud	Multi-purpose room, hallway outside MPR	<1% asbestos per PLM
MPR-TDWTM-1-1	Textured drywall/taping mud	Multi-purpose room, boys' restroom	<1% asbestos per PLM
MPR-TDWTM-1-2	Textured drywall/taping mud	Multi-purpose room, girl's restroom	No Asbestos Detected
MPR-TDWTM-1-3	Textured drywall/taping mud	Multi-purpose room, staff restroom	No Asbestos Detected
MPR-TDWTM-2-1&2	Textured drywall/taping mud	Multi-purpose room, room 601	No Asbestos Detected
700-DWTM-1-3	Drywall/taping mud	700 Wing, room 703	No Asbestos Detected
700-SU-1-&2	Black sink undercoating	700 Wing, room 703	No Asbestos Detected
700-ACT-1&2	1'x1' acoustical ceiling tile with pinholes and fissures	700 Wing, room 703	No Asbestos Detected
700-SVF-1&2	Beige pebble sheet vinyl flooring	700 Wing, room 703	No Asbestos Detected
500-FC-1	Gray floor coating under carpet	500 Wing, room 504	No Asbestos Detected
500-CG-1	Yellow/green carpet glue	500 Wing, room 505	No Asbestos Detected
500-VFT-1	Wood pattern vinyl floor tile with mastic	500 Wing, room 501	No Asbestos Detected
500-VFT-2	Wood pattern vinyl floor tile with mastic	500 Wing, room 502	No Asbestos Detected
500-PBDW-1	Press board and drywall	500 wing, room 504	No Asbestos Detected
500-PBDW-2	Press board and drywall	500 Wing, room 505	No Asbestos Detected
500-PBDW-3	Press board and drywall	500 Wing, room 501	No Asbestos Detected
500-ACP-1	2'x4' acoustical ceiling panel	500 Wing, room 505	No Asbestos Detected
500-ACP-2	2'x4' acoustical ceiling panel	500 Wing, room 502	No Asbestos Detected
500-ACP-3	2'x4' acoustical ceiling panel	500 Wing, room 504	No Asbestos Detected
LIB-DWTM-1	Drywall/taping mud	Library, custodial storage	No Asbestos Detected

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Sample ID	Material	Location	Results
LIB-DWTM-2&3	Drywall/taping mud	Library, computer lab storage	No Asbestos Detected
LIB-DWTM-4	Drywall/taping mud	Library, work room	No Asbestos Detected
LIB-DWTM-5	Drywall/taping mud	Library, custodial office	No Asbestos Detected
LIB-BBM-1	Baseboard mastic	Library, custodial office	No Asbestos Detected
LIB-BBM-2	Baseboard mastic	Library, custodial storage	No Asbestos Detected
LIB-VFT-1	12" blue vinyl floor tile with mastic	Library, work room	No Asbestos Detected
LIB-VFT-2	12" blue vinyl floor tile with mastic	Library, computer lab storage	No Asbestos Detected
LIB-ACT-1-1&2	2'x4' acoustical ceiling tiles (6" pattern)	Library	No Asbestos Detected
LIB-ACT-2-1&2	2'x 4' acoustical ceiling tile	Library	No Asbestos Detected
Not Sampled	Asbestos cement "transite" flue pipe	600 Wing, room 602 (music room)	Known ACM
Not Sampled	Asbestos cement "transite" panels	Interior/exterior of Admin, 100 & 200 Wings & MPR	Assumed ACM

REGULATORY CONSIDERATIONS

Current EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations require that most ACM be removed prior to demolition or renovation activities. Other regulations apply to construction activities and notification requirements for projects involving ACM/ACCM. At both the federal and state levels, these include, but are not limited to Federal OSHA regulation 29 CFR 1910 and 1926, the California Health Code, California OSHA 8 CCR 1529 and Proposition 65 which requires the posting of notifications when a facility is known to contain toxic substances found on the governors list.

As previously mentioned in this report both the California Occupational Safety and Health Administration (Cal-OSHA) and the Environmental Protection Agency (EPA) define material with contains more than one percent asbestos to be an asbestos containing material (ACM). However, Cal-OSHA has an additional classification for manufactured materials found to contain asbestos in quantities between 0.1% to 1%. This classification is referred to as Asbestos Containing Construction Materials (ACCM).

Analytical results indicated that materials containing various percentages of asbestos are present within the campus. If any of these materials are located within the path of construction NorBay Consulting recommends that a licensed asbestos abatement contractor be utilized to remove said materials prior to renovation activities taking place that would disturb them.

The contractor chosen must be familiar with and abide by the strict rules and regulations regarding the removal, packaging and disposal of asbestos containing materials and/or materials containing detectable levels of asbestos.

LEAD IN PAINT XRF SURVEY PROCEDURES

The sampling strategy employed by NorBay Consulting was performed as outlined in Title 17, California Code of Regulations, Division 1, Chapter 8 and in accordance with those survey procedures listed in the “Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing”, June 1995 by the U.S. Department of Housing and Urban Development (HUD). Our investigation included the collection of readings on similar painted surfaces (not every component in every room as dictated by HUD guidelines.)

Prior to data collection, painted/coated surfaces were categorized into distinct area of homogeneity, substrate material, building material and/or distinct paint type. After the items have been identified, a representative reading of the painted/coated surface is collected. Because painted/coated have compositional variability due to one or more paint layers, it is possible to obtain different readings for samples from the same homogeneous area. Therefore, a homogeneous area with at least one XRF reading of 1.0 mg/cm² or greater will result in the entire homogeneous material, substrate and/or distinct paint type being designated as lead based paint. Each XRF reading along with the location, component, substrate, color and condition of the painted/coated surface are included in the XRF readings table located at the end of this report.

SAMPLE ANALYSIS

The XRF testing was performed in accordance with the aforementioned criteria, using an RMD-LPA-1 XRF Analyzer. Exposure times are internally determined by the instrument and are based on a number of factors including lead content, substrate and source strength. The instrument is calibrated to the manufacturer’s specifications and was periodically verified against known lead standards produced by the National Institute of Standards and Testing. HUD defines action level as the hazard level or which a corrective response action will be required. Currently, the most widely used levels for determining lead-based paint (LBP) is 1.0 mg/cm² (as measured by an XRF) established by HUD and adopted by the U.S. Environmental Protection Agency. The action level is 5000 parts per million (ppm) or 0.5% by weight when collected paint chip samples are analyzed using atomic absorption spectroscopy (AAS). HUD guidelines consider XRF findings of 1.0 mg/cm² or greater, as lead based paint, which may be a potential hazard. It is extremely important to understand that XRF readings, which have a value of 0.0 mg/cm², do not necessarily mean there is no lead present but are below what the instrument can detect.

RESULTS

During our investigation a total of four hundred-forty-two (442) XRF readings were collected of various interior/exterior components and fixtures. Of these readings, thirty-nine (39) contained lead-based paint/glazing. Components found to contain lead based paint included the following:

- ◆ Exterior gray metal overhang posts on the 100 Wing, Administration Building and 200 Wing,
- ◆ Exterior gray wooden header on Wing 100;
- ◆ Interior white wooden window and door systems on the 100 Wing;
- ◆ Interior white wooden door frame to IT room in the Administration Building;
- ◆ Interior white wooden door and window systems in the 200 Wing;
- ◆ Interior red ceramic wall (lower) in both Boy’s and Girl’s restrooms in the 400 Wing;

In addition, certain components, both interior and exterior were found to be coated with detectable levels of lead. Disturbance of these components are subject to Cal-OSHA lead and construction standard requirements.

For a complete listing of readings see the attached XRF Readings sheet.

REGULATORY CONSIDERATION/RECOMMENDATIONS

Current EPA and HUD guidelines recommend that surfaces containing lead based paint in damaged condition to be considered “lead-based paint hazards” and should be addressed through abatement (permanent removal) or interim controls (temporary). Surfaces containing lead based paints in intact condition should be monitored, but are not considered to be “lead based paint hazards”.

At the time of our inspection, the following components were found to contain damaged lead based paints/glazing and are considered a “lead-based paint hazard”.

- None.

Construction Work Standards

At present, there are no state or federal laws dealing with mandatory abatement following the identification of lead containing or lead based paints prior to disturbance. However, in 1993 the Occupational Safety and Health Administration promulgated legislation (29 CFR 1926.62 and 8 CCR 1532.1) entitled “lead Exposure in the Construction Industry” which deals with worker exposure to lead.

It should be noted that aside from the HUD definition of lead-based paint (1.0 mg/cm²), OSHA regulates worker protection and work practices on building components containing any detectable amounts of lead. Therefore, components determined to contain less than 1.0 mg/cm² may still be subject to OSHA regulations, if these materials are to be disturbed. This standard essentially states that work, involving components containing any amount of lead must follow certain guidelines. These guidelines include but are not limited to training, personal protective equipment and specific work practices whenever workers disturb lead in any concentration because the disturbance may result in airborne exposures over action or permissible exposure limits.

This legislation requires that any task that may potentially expose workers to any concentration of lead be monitored to determine workers eight-hour time weighted average (TWA) exposure to lead. Prior to conduction of activities that may generate a lead exposure, such workers must be properly fitted with respiratory protection and protective clothing until eight-hour TWA results reveal exposures within acceptable levels.

Any proposed renovation/demolition, which may involve the removal of building materials with lead-based paint and/or lead containing painted surfaces, should include provisions to minimize the potential for airborne release of lead contaminated dust. It is recommended, as a minimum, that demolition of building materials which have lead-based and/or lead-containing paints be conducted with the materials kept in a wetted state and removed in sections, as feasible, to reduce the potential for airborne lead emissions.

MERCURY CONTAINING LIGHT TUBES & THERMOSTATS

Mercury containing florescent light tubes are present throughout the campus however no mercury containing thermostats were observed.

In California, the Cal-EPA Department of Toxic Substances Control regulates the management of spent florescent light tubes and thermostats destined for disposal because they contain small quantities of mercury, cadmium and antimony. Florescent light tubes have been classified as a "Universal Waste" under the California University Waste Rule. This rule became effective on February 8, 2002 and allows common, low hazard wastes to be managed under less stringent requirements than other hazardous wastes.

As of February 9, 2006, large and small quantity generators are required to ship their "Universal Waste" to either a universal waste transfer station, a recycling facility or a disposal facility (Title 22, Division 4.5, Chapter 23, Section 66273.8). If the florescent light tubes and/or thermostats are not recycled, then they must be manifested and disposed of in a Class I landfill.

Prior to renovation activities, the light tubes should be removed as a separate item and/or concurrently with other hazardous materials removal. Precautions should be utilized to reduce the amount of breakage due to the potential release of mercury, cadmium and antimony particles.

POLYCHLORINATED BIPHENYLS (PCB'S)

In addition to the mercury, cadmium & antimony containing florescent light tubes light fixture ballasts throughout the campus may contain polychlorinated biphenyls (PCB's). All ballasts manufactured through 1978 are magnetic ballasts that contain PCB's. Almost all older florescent light fixtures have PCB ballast because the use of PCB containing items was allowed to continue beyond the original 1978 TSCA ban. Since the supply of PCB containing ballasts likely lasted for several years after the ban took effect, any buildings built before 1980, without a complete lighting retrofit, is likely to have PCB ballasts.

Magnetic ballasts manufactured after 1978 that do not contain PCB's are labeled "No PCB's" or "PCB Free". Electronic ballasts are PCB free and should be clearly marked as electronic. If a ballast has no manufacture date or is not specifically labeled "No PCB's" or "PCB Free" it should be assumed to contain PCB's.

No light fixture ballasts were available to be disassembled thus NorBay Consulting recommends that all light fixture ballasts be checked for PCB's prior to removal and disposal. Any PCB ballast located should be removed, packaged and disposed of as PCB waste.

LIMITATIONS

NorBay Consulting conducted this inspection and prepared this report for the sole and exclusive use of Greystone West Company/Walnut Creek School District., the only intended beneficiary of our work. NorBay Consulting has performed this inspection in a substantial and workmanlike manner, in accordance with generally accepted methods and practices of the profession, and consistent with that level of care and skill ordinarily exercised by reputable environmental consultants under similar conditions and circumstances.

Pre-Renovation Hazardous Materials Inspection
Walnut Creek Intermediate School
Walnut Creek, California

NorBay Consulting did not attempt to disassemble mechanical equipment, open pipe chases or access materials within wall voids. Regardless of the thoroughness of an inspection, the possibility exists that some areas containing asbestos containing materials and/or lead based paint were not identified or inaccessible.

Enclosed you will find the laboratory reports and chain of custody form for all asbestos bulk samples collected. In addition, a spread sheet of all lead readings and the mandatory CDPH Form 8552 is attached.

If you have any questions regarding this report or if you require additional information, please do not hesitate to contact me at (415) 507-9786.

Sincerely,
NORBAY CONSULTING

Bob Gerhold

Bob Gerhold
Certified Asbestos Consultant #92-0157
CDPH Lead Inspector/Assessor

Pre-Renovation Hazardous Materials Inspection
Walnut Creek Intermediate School
Walnut Creek, California

**LABORATORY REPORTS AND
CHAIN OF CUSTODY FORMS**

POLARIZED LIGHT MICROSCOPY (PLM)

XRF READINGS

Readings shaded in gray indicate lead based paint

Readings shaded in green indicate lead containing paint

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CDPH FORM 8552