

3.3.a GENERAL DESCRIPTION

Hazardous materials including lead, asbestos & PCB's are located throughout the building. This is common, in buildings of this age. It has been sampled and documented and the condition of these materials is tested regularly to ensure that no hazard is being presented to the occupants. Universal Engineering performed sampling and tests and recorded the findings. If any major work is proposed, the hazardous materials must be abated according to regulations.

3.3.b Findings

3.3.b.1 Asbestos

A. Samples Collected:

Thirty three (33) bulk samples were collected from materials suspected of containing asbestos, including:

- Beige 12" x 12" vinyl floor tile at main corridor by cafeteria
- Mastic for beige 12" x 12" vinyl floor tile at main corridor by cafeteria
- Beige 12" x 12" vinyl floor tile at S Wing
- Mastic for beige 12" x 12" vinyl floor tile at S Wing
- Green 12" x 12" vinyl floor tile at main corridor by gymnasium (pic #2)
- Mastic for green 12" x 12" vinyl floor tile at main corridor by gymnasium
- Glue dab for 1' x 1' acoustical ceiling tile above Tectum ceiling at upper a-wing
- Brown glue on tab holding fiberglass ceiling at boiler room.
- Glue on tab holding fiberglass insulated duct at boiler room Air-Handling Unit
- Lab counter tops at science wing
- Fire door insulation at gymnasium lobby
- Black/white mastic under fiberglass insulated duct at girls locker room
- Boiler insulation at boiler room
- Paper under floor at small old gymnasium
- Paper under floor at large old gymnasium
- Paper under floor at first floor old gymnasium

Picture 1



Picture 2



Picture 3



A. Samples Collected continued:

- Exterior vertical caulking in blue wood siding at front of school
- Exterior window framing putty (pic #3)
- Interior window framing putty at boiler room
- Unit vent grille caulking
- Door framing putty
- Soft ceiling plaster at auditorium
- Soft ceiling plaster at girl's room
- Dampproofing on walls at gymnasium air room
- Black mastic under fiberglass insulated duct air gymnasium air room
- Black mastic under fiberglass on ceilings in crawl space air room
- Mastic on tabs on fiberglass on ceilings in crawl space air room
- Black mastic under fiberglass insulated duct at crawl space

The following suspect materials were found to contain asbestos from previous Asbestos Hazardous Emergency Response Act (AHERA) reports.

- Pipe and hard joint insulation (pic #1)
- Stage fire curtain
- Tank insulation
- Duct insulation
- Boiler insulation
- Floor tile mastic
- Transite panels

B. Sample Results

The following suspect materials were found to be Asbestos Containing Material (ACM):

<u>Type of Material</u>	<u>Sample Results</u>
• Green 12" x 12" vinyl floor tile at main corridor by gymnasium	4% Asbestos Chrysotile
• Glue daub for 1' x1' acoustical ceiling tile above Tectum ceiling	<1% Asbestos Chrysotile
• Brown glue on tab holding fiberglass ceiling at boiler room 1 2 %	Asbestos Chrysotile
• Glue on tab holding fiberglass insulated duct at boiler room AHU	12% Asbestos Chrysotile
• Fire door insulation at gymnasium lobby	35% Asbestos Chrysotile
• Exterior vertical caulking in blue wood siding at front of school	5% Asbestos Chrysotile
• Exterior window framing putty	6% Asbestos Chrysotile
• Interior window framing putty at boiler room	3% Asbestos Chrysotile
• Unit vent grille caulking	5% Asbestos Chrysotile
• Door framing putty	5% Asbestos Chrysotile
• Soft ceiling plaster at auditorium	1.25% Asbestos Chrysotile
• Soft ceiling plaster at girl's room	<1% Asbestos Chrysotile
• Dampproofing on walls at gymnasium air room	20% Asbestos Chrysotile
• Mastic on tabs for fiberglass on ceilings in crawl space air room	50% Asbestos Chrysotile
• Black mastic under fiberglass insulated duct at crawl space	35% Asbestos Chrysotile

3.3.b.2 Lead

Samples Collected:

Seven (7) bulk samples were collected from various building materials suspected of containing Lead Based Paint (LBP).

B. Sample Results

Lead Based Paint (LBP) was found on all surfaces tested.

Lead Abatement is not required. However, federal, state and OSHA regulations must be complied with by the general contractor during demolition.

3.3.b.3 PCB's in Light Fixtures

Ballasts in light fixtures were visually inspected for the presence of PCB's. Most of ballasts in light fixtures are new and do not contain PCB's. However, old ballasts that may contain PCB's were found at various locations.

3.3.b.4 UST

Underground oil tanks were found. However, according to the school custodial personnel, oil was removed and the tanks were filled with concrete. No records were found on-site.

3.3.c Observations

The identified accessible suspect Asbestos Containing Materials (ACM) in the building does not present an immediate health risk to the building occupants as long as these materials are not disturbed, particularly in such a manner as to create an airborne asbestos fiber hazard.

1. Blackboard and glue were assumed to contain asbestos.
2. Heat shield paper in small round light fixtures was assumed to contain asbestos.
3. Flexible connectors were assumed to contain asbestos.
4. Insulation on two boilers was removed and re-insulated with non-ACM insulation.
5. Roofing material was assumed to contain asbestos. OSHA and local regulations apply during removal and for proper disposal.
6. New vinyl floor tiles were found throughout the School. Some ACM old tiles were observed at various locations. Bulk sample from mastic indicated that asbestos was found. Therefore, it should be assumed that all mastic is ACM.
7. Dampproofing material was found to contain asbestos. However, ACM dampproofing material does not have to be removed by a licensed asbestos abatement contractor. OSHA and local regulations apply during demolition of the walls and for proper disposal.

*ACM may be found inside the boilers.

3.3.d. Description of Survey Methods and Laboratory Analyses:

Asbestos samples were collected using a method that prevents fiber release. Homogeneous sample areas were determined by criteria outlined in EPA document 560/5-85-030a. Bulk material samples were analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques with EPA method 600/M4-82-020.

Samples for lead were collected and analyzed in accordance with EPA method SW 846.

The building was inspected by a Massachusetts licensed asbestos inspector Leonard J. Busa.