



Introduction

Asbestos was a common component in building materials, such as thermal insulation and flooring, used in construction through the early 1980's. Since portions of PCB's main building at 3425 Walden was contructed in 1981, testing was performed to determine if Asbestos Containing Materials are present in the building. Results of the testing indicate the presence of asbestos in the mastic under floor tiles in limited areas of the building, and that the Asbestos Containing Materials are in good condition. Therefore, in accordance with OSHA 1910.1001, PCB Piezotronics has adopted an Asbestos Operations and Maintenance Plan as required.

Purpose

The purpose of the Asbestos Operations and Maintenance Plan is to control building occupant and employee exposure to asbestos fibers. In addition, the procedures in this Plan attempt to minimize any potential hazard posed by Asbestos Containing Materials or Presumed Asbestos Containing Materials during cleaning, maintenance, and general operation activities.

This Plan applies to employees and contractors.

Definitions

Asbestos – Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophylite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated or altered.

Asbestos Containing Material (ACM) - Any material or product that contains more than 1% asbestos.

Category I Non-Friable ACM – Material such as packaging, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos.

Category II Non-Friable ACM – Any material containing more than 1% asbestos that is not Category I Non-Friable ACM, and that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. Category II ACM includes, but is not limited to, 1) asbestos cement siding and shingles, 2) Transite panel boards, and 3) asbestos cement pipe (asbestos cement pipe may not be limited to buildings).

Friable ACM – Any material containing more than 1% asbestos that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

High Efficiency Particulate Air (HEPA) Filter – A filter capable of trapping and retaining at least 99.97% of monodispersed particles of 0.3 micrometers or larger in diameter.

Presumed Asbestos Containing Material (PACM) – Thermal System Insulation (TSI) and surfacing material found in buildings constructed before 1981, and floor tile installed in buildings through 1981 may contain asbestos. Although it is unlikely, some flooring installed after 1981 may contain asbestos. Until sampling demonstrates that the material has 1% or less asbestos, these materials are considered PACM.

Regulated Asbestos Contaning Material (RACM) – RACM includes 1) Friable asbestos material, 2) Category I Non-Friable ACM that has become friable, or has been subjected to sanding, grinding, cutting, or abrading, and 3) Category II Non-Friable ACM that has a high probability of becoming crumbled, pulverized, or reduced to powder during the course of demolition or renovation operations.





Asbestos Containing Material Locations in the 3425 Walden Building

Actual survey results have confirmed the presence of ACM in buildings and locations listed in the asbestos inventory. The asbestos in these materials does not constitue a health hazard if left undisturbed.

Material	Location	Quantity	Condition
12"x12" Floor Tile – White (See Note 1)	Located in 1981 and 1990's section of facility. (See Site Map)	12,700 Sq. Ft.	Non-Friable and Intact
Floor Tile Mastic – Black	Located in 1981 and 1990's section of facility. (See Site Map)	12,700 Sq. Ft.	Non-Friable and Intact

Note 1 – Materials were assumed to contain because the material was adhered to another ACM and must be managed as such.

Responsibilities

A. Employees

- 1. All employees (and contractors) need to be aware of the presence, general location, and physical condition of ACM, and should avoid disturbing the material.
- 2. Maintenance employees, and any employees performing facility maintenance, who may disturb ACM during their normal job duties, must complete a minimum of 2 hours of asbestos awareness training before beginning duties where there is potential for contact with ACM. Training is required annually. Refer to the Asbestos Operations and Maintenance Plan for specific training requrements.
- 3. Any employees who notice damage or deterioration of ACM should notify their supervisor, manager, or Human Resources Dept.

B. Supervisors

- 1. Ensure employees receive appropriate training as required.
- 2. Ensure that employees do not perform tasks that have the potential to disturb ACM unless they have received asbestos awareness training as noted in section A.2 above.
- 3. Notify Management and/or Human Resources of any damage to or deterioration of ACM, including any reports from employees.

C. PCB Piezotronics, Inc

- 1. Notify employees and contractors of the presence, location, and physical condition of ACM in the building, and stress the need to avoid disturbing the material.
- 2. Distribute written notices, and post appropriate signs in affected areas, of the presence of ACM.





- 3. Make the Asbestos Operations an Maintenance Plan available to anyone who might work on or disturb ACM.
- 4. Ensure contractors who may come in contact with ACM are aware of the presence of this material by reviewing the Asbestos O&M Plan.
- 5. Perform biannual inspection of ACM, and immediately report any damage or deterioration to Management and Human Resources. Use TCS Form # PE044 to record the results of these inspections.
- 6. Retain all facility asbestos management documents, including copies of asbestos inspection and assessment results, Asbestos O&M Plan, biannual ACM visual inspection records, employee awareness training records, and changes to location, condition, or quantity of ACM. These documents will be retained by Human Resources.
- 7. Manage and update the Asbestos Operations and Maintenance Plan as needed.
- 8. Ensure that any facility repair, reconstruction, or asbestos abatement activities that are likely to disturb ACM are preformed by a contractor that is in full compliance with New York State certification and licensing standards for asbestos abatement, and that the contractor follows all OSHA and EPA requirements when performing the work.

Training

All employees need to be aware of the presence, general location, and physical condition of asbestos and should avoid disturbing the material. These employees will be trained during their department orientation (PE025).

Employees who may be exposed to asbestos during their normal job duties (all maintenance, custodial, and facility employees) will receive training before they begin duties where there is a potential for contact and annually thereafter to ensure that they understand PCB's Asbestos control plan. This training will be a minimum of 2 hours and will consist of:

- The content of the OSHA standard, including appendices.
- The health effects associated with asbestos exposure.
- The locations of asbestos (ACM & PACM) at the facility.
- Recognition of ACM and PACM damage and deterioration.
- The O&M plan for the facility, and
- Proper response and safe work practices to fiber release episodes.

All original training records will be maintained by Human Resources in accordance with PE1015. Employees are instructed to direct any questions they may have regarding hazards on the job to their immediate supervisor, a member of the PCB Safety Committee, or the Human Resources Department.

Safe Work Practices

PCB has conducted appropriate testing to identify the presence of ACM in the facility. The results of this testing indicate that black mastic adhesive under floor tiles in two areas of the facility contain more than 1%





asbestos, classifying the black mastic as ACM. It is important to note that the floor tile itself does not contain asbestos, but must be managed as if it does since the black mastic is adhered to the bottom of floor tile. Therefore, as long as the floor tile in the areas designated as containing ACM is not disturbed, there is very limited chance of exposure during normal production activites.

It is important to minimize the disturbance of ACM and subsequent potential release of asbestos fibers. Therefore, all employees must observe the following work practices to avoid disturbing the black mastic and floor tiles in the affected areas:

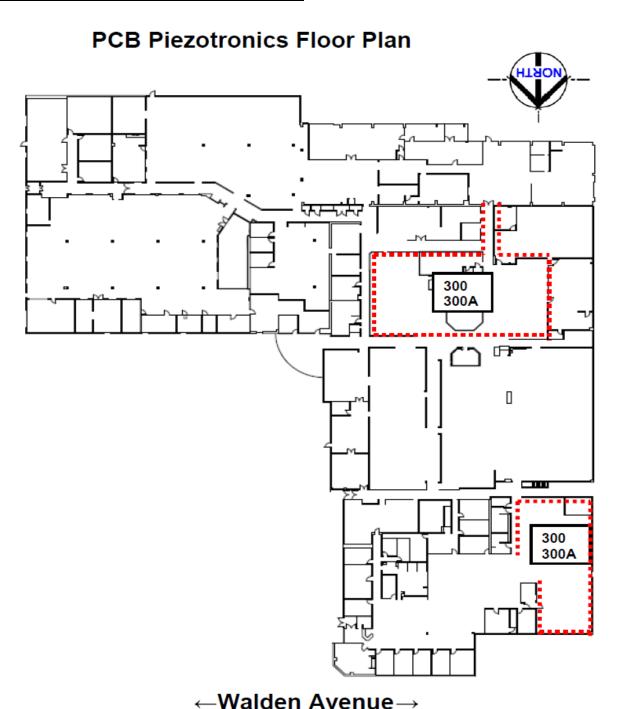
- 1. Do not drill holes into the floor tile in the affected areas.
- 2. Do not sand, saw, or grind floor tiles in the affected areas.
- 3. Do not damage the floor tiles in affected areas while moving equipment, benches, materials, etc.
- 4. Do not use an ordinary vacuum, or dry sweep debris containing asbestos. Use a HEPA vacuum to clean up debris if necessary.
- 5. Broken floor tiles in the affected areas should only be removed and replaced by employees who have received the required asbestos awareness training noted in section A.2 of this User Guide.

Asbestos Inspection Form - # PE044





Site Locations of Asbestos Containing Materials



Legend:

: Location of Asbestos Containing Materials. (HAN Numbers 300 and 300A)

HAN 300 : 12"x12" Floor Tile - White HAN 300A : Floor Mastic - Black