

Asbestos Management Program

(EHS Program Manual 7.5)



1.0 Overview

Environmental Health and Safety (EHS) at Weill Cornell Medicine (WCM) has developed this Asbestos Management Program because many WCM buildings were constructed when Asbestos or Asbestos-Containing Material (ACM) was commonly used in building materials. Because of this, ACM is still present in some buildings at WCM.

This program shall serve as the official procedure for WCM, which has a policy of in-place management. Hence, ACM is only disturbed or removed when absolutely necessary. Asbestos disturbance or remediation should only occur during building renovations, demolition, or when the material is found to be damaged or have a potential for damage.

In recognizing the health impact associated with asbestos, WCM is committed to the Asbestos Management Program. EHS shall implement this program with the cooperation of departments listed in this manual.

2.0 Table of Contents

1.0	Overview	1
2.0	Table of Contents	1
3.0	Objectives	2
4.0	Applicability	2
4.1	LOCATIONS	3
4.2	TYPE OF WORK.....	3
5.0	Responsibilities.....	3
5.1	ENVIRONMENTAL HEALTH AND SAFETY (EHS)	3
5.2	SENIOR MANAGEMENT FOR ENGINEERING AND MAINTENANCE (E&M) AND CAPITAL PLANNING	3
5.3	PROJECT DIRECTORS AND PROJECT MANAGERS.....	4
5.4	ENGINEERING AND MAINTENANCE PERSONNEL.....	4
5.5	INDEPENDENT MONITORS	4
5.6	ASBESTOS ABATEMENT CONTRACTORS.....	4
5.7	NON-ASBESTOS CONTRACTORS.....	5
6.0	Asbestos Categories	5
6.1	NOT PRESUMED ASBESTOS-CONTAINING MATERIAL.....	5
6.2	SURFACING MATERIALS.....	5
6.3	THERMAL SYSTEM INSULATION	5
6.4	MISCELLANEOUS MATERIALS	5
7.0	Asbestos Identification and Surveys	5
7.1	BUILDING REVIEW	5
7.2	VISUAL INSPECTIONS	5
7.3	BULK SAMPLING	5
7.4	LABORATORY ANALYSIS	6
7.5	AIR SAMPLING.....	6
8.0	Regulatory Written Notification	6
8.1	EPA REQUIREMENTS	6
8.2	NEW YORK STATE REQUIREMENTS	6
8.3	NEW YORK CITY REQUIREMENTS	6
8.3.1	ACP-7 Notification.....	6
8.3.2	Worksite Safety Plan.....	6

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 1 of 15
---------------------------------------	--------------------------------------	--	-------------------------



Environmental Health and Safety

TEL 646-962-7233 WEB weill.cornell.edu/ehs EMAIL ehs@med.cornell.edu

Weill Cornell Medicine | 402 East 67th Street, Room LA-0020 | New York, NY 10065



8.3.3 ACP-9 Notification 6

8.3.4 ACP-8 Notification 7

8.3.5 ACP-5 Notification 7

8.4 SUMMARY OF NOTIFICATIONS 7

8.5 POSTING OF NOTIFICATIONS 7

9.0 Types of Asbestos Work 7

9.1 PLANNED PROJECTS 7

9.2 EMERGENCY PROJECTS 8

9.2.1 Emergency Procedure 8

9.3 OPERATIONS AND MAINTENANCE 9

9.3.1 Notification 9

9.3.2 Surveillance 9

9.3.3 Work Practices 9

10.0 Training 9

11.0 Record Retention and Availability 9

11.1 PROGRAM REVISIONS 10

12.0 Definitions 10

13.0 References 12

Appendix A- Required Asbestos Certifications 13

PERSONNEL CERTIFICATIONS 13

COMPANY / CONTRACTOR CERTIFICATIONS 13

LABORATORY CERTIFICATIONS 14

WASTE HAULERS / LANDFILL REQUIREMENTS 14

Appendix B – Asbestos Project Flow Chart 15

3.0 Objectives

The Asbestos Management Program aims to protect the WCM community from the health hazards related to asbestos exposure. This goal is accomplished through management of the material that is in place, material that can potentially be accidentally damaged or disturbed, and material being abated as part of construction, renovation, or emergency projects.

Asbestos is a mineral mined from the earth similar to metals and other minerals. Asbestos was once used heavily in the construction industry due to its unique properties that demonstrate resistance to heat, fire, chemicals, electricity, sound conduction, and moisture erosion. Asbestos is a fibrous material that can easily break and become airborne and inhalable.

As a result of its resistance properties, asbestos was used in a variety of materials in building construction:

- Thermal system insulation (pipes, tanks, ducts) – for heating and cooling.
- Surfacing materials (ceilings, walls) – for fire resistance and acoustical purposes.
- Other products (floor and ceiling tiles, glues and adhesives, fireproofing for doors).
- Roofing – weather resistance.

Asbestos or Asbestos-Containing Material (ACM) is not hazardous if kept in place and in good condition. It becomes a potential health hazard when the material is disturbed and is rendered friable. Friability is the ability for a material, when damaged, to be pulverized and become airborne and respirable. This damage can arise from daily elements of physical or mechanical pressure or through abatement (removal) of the material. This program will address these issues and outline the management of the ACM to eliminate the potential hazard to the WCM community and meet all applicable regulations on the federal, state, and city levels.

4.0 Applicability

This asbestos management program covers the entire campus of WCM, including all spaces owned and leased by WCM or used by WCM affiliates.

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 2 of 15
---------------------------------------	--------------------------------------	--	-------------------------



4.1 LOCATIONS

The following buildings owned by WCM are known to contain asbestos:

- A, B, C, D, LBRC, E, Whitney, (1300 York Avenue)
- Olin Hall (445 East 69th Street)
- Lasdon House (420 East 70th Street)
- S Building (515 East 71st Street)
- S Citigroup Imaging Center (SI Building) (516 East 72nd Street)

The presence and use of asbestos on WCM campus are not limited to the above buildings. As WCM purchases new buildings, it will be determined if those buildings contain ACM.

4.2 TYPE OF WORK

This plan covers work including but not limited to:

- Planned renovation and demolition projects.
- In-house repairs.
- General maintenance of asbestos materials in visible areas.

5.0 Responsibilities

5.1 ENVIRONMENTAL HEALTH AND SAFETY (EHS)

EHS obligations include:

- Serve as the WCM Asbestos Coordinator.
- Coordinate and maintain blanket contracts with vendors for small projects.
- Act as the emergency contact in all matters pertaining to asbestos.
- Establish, implement, and maintain the Asbestos Management Program.
- Assign Independent Monitors to perform asbestos surveys.
- Oversee all asbestos surveys.
- Approve and maintain the listing of all consultants, contractors, and laboratories used for any asbestos activities, and provide that list to project managers.
- Coordinate the bidding process with independent monitor and abatement contractors.
- Provide annual awareness training to WCM Engineering and Maintenance (E&M) employees who may come in contact with or work around ACM.
- Deliver pertinent information to potentially affected employees and students in matters regarding asbestos.
- Supervise asbestos independent monitors with regards to surveys, sampling, and management of asbestos abatement projects.
- Collaborate with asbestos contractors to ensure that their practices meet WCM standards and that they are fully licensed by all relevant government agencies to perform ACM activities.
- Analyze and interpret all monitoring and survey data.
- Authorize all required Asbestos Notification Forms (e.g., ACP-7).
- Provide required notification and postings prior to asbestos abatement.
- Retain all required recordkeeping for the legally specified time period.

5.2 SENIOR MANAGEMENT FOR ENGINEERING AND MAINTENANCE (E&M) AND CAPITAL PLANNING

Senior leadership for E&M and Capital Planning duties include:

- Ensure the requirements of the Asbestos Management Program are adhered to by personnel under their supervision.
- Verify that all WCM employees that may come into contact with potential ACM receive annual awareness training, as required by OSHA (OSHA 1910.1001(j) (iv)).

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 3 of 15
---------------------------------------	--------------------------------------	--	-------------------------



5.3 PROJECT DIRECTORS AND PROJECT MANAGERS

Project Directors and Managers must:

- Notify EHS of all new projects, regardless of how small or minor the project.
- Assist EHS in reviewing all projects to determine if ACM will be or may be disturbed.
- Provide architectural project drawings and written work scope to the Independent Monitor.
- Assure that adequate funding is included in project budgets to address all required abatement.
- Prevent the disturbance or removal of potential ACM until the ACM status of said material is verified by EHS.
- After receiving Independent Monitor’s written report of survey results, coordinate asbestos contract management activities, including bid solicitation and contract award.
- Manage all contracts with abatement contractors for large jobs not covered by a blanket contract.
- Oversee the asbestos project via coordination of shutdowns, access, and security notifications.
- Notify EHS of any changes to the scope of the project.
- Ensure that no asbestos abatement activities are performed without an Independent Monitor present.
- Inform EHS during the course of the project if any suspect ACM is disturbed outside of any planned abatement activities.

5.4 ENGINEERING AND MAINTENANCE PERSONNEL

E&M staff responsibilities include:

- Inform supervisors of any potential ACM encountered during work activities or of any ACM that may need to be abated for work to occur.
- Prevent the disturbance or removal of potential ACM until verified as non-ACM by EHS or Independent Monitor.
- Inform EHS of the location of suspect material as part of the Operations and Maintenance portion of this Program.
- Attend required asbestos awareness training if the potential exists for the employee to come in contact with ACM during normal work activities, as required by this Program.

5.5 INDEPENDENT MONITORS

Independent monitors tasks include:

- Perform surveys and prepare asbestos abatement specification documents (“bid documents”) for assigned projects as directed by EHS.
- Provide written reports of survey scope and results to Project Manager and EHS.
- Perform the duties of project monitoring and air monitoring for designated asbestos abatements.
- Maintain all required licenses and certifications (refer to [Appendix A](#)).
- Ensure compliance with all applicable federal, state, and local requirements during asbestos activities.
- Keep EHS informed on all matters relating to asbestos projects.
- Use only approved laboratories and licensed monitors for asbestos activities.
- Provide air monitoring results to EHS in a timely fashion.
- Deliver EHS close-out report packages at the completion of abatement activities.

5.6 ASBESTOS ABATEMENT CONTRACTORS

Contractors tasked with asbestos abatement are required to:

- Maintain all required licenses and certifications (refer to [Appendix A](#)).
- Ensure compliance with all federal, state, and local requirements during asbestos activities.
- File documentation with regulatory agencies as needed and provide copies to EHS.
- Follow the recommendations of Independent Monitors.
- Coordinate service connections and disconnections with Project Manager (e.g., electrical and water connections and HVAC shutdowns).
- Keep EHS and Project Managers informed on all matters that concern WCM with regards to the project.
- Provide EHS required close-out packages with necessary documentation upon completion of the project (including all waste manifests, filings, etc.).

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 4 of 15
---------------------------------------	--------------------------------------	--	-------------------------



5.7 NON-ASBESTOS CONTRACTORS

Contractors not assigned to asbestos abatement activities must:

- Alert Project Managers immediately of potential asbestos situations discovered in the course of their work.
- Prevent the disturbance or removal of potential ACM until EHS verifies the ACM status of said material.
- Inform EHS if any suspect ACM is disturbed outside of any planned abatement activities.

6.0 Asbestos Categories

According to the U.S. Environmental Protection Agency (EPA), ACM is defined as material that contains greater than 1% asbestos. ACM is classified into the categories described in this section.

6.1 NOT PRESUMED ASBESTOS-CONTAINING MATERIAL

Wood, metal, and glass are the only materials not classified as potential ACM. All other building materials are classified as potential ACM, meaning that there is a possibility that they have been manufactured using asbestos.

6.2 SURFACING MATERIALS

ACM sprayed, troweled, or otherwise applied to surfaces (walls, ceilings, members) for acoustical, decorative, or fireproofing insulation.

6.3 THERMAL SYSTEM INSULATION

ACM applied to pipes, boilers, tanks, ducts, hot and cold-water systems, Heating Ventilation and Air Conditioning (HVAC) systems, or other interior structural components; in order to prevent heat loss or gain, water condensation, or for other purposes. Examples include pipe lagging, pipe wrap, block, boiler insulation, gaskets, and ropes.

6.4 MISCELLANEOUS MATERIALS

Other products and materials, including floor tiles, ceiling tiles, roofing felt, concrete pipe, outdoor siding, and fabrics (which can be friable or non-friable).

7.0 Asbestos Identification and Surveys

Due to the quantity and diversity of ACM found within the College, several approaches to asbestos identification are utilized. These methods include building review, visual inspection, bulk sampling of suspect materials, and the assumption that certain materials commonly found in the WCM facilities contain asbestos.

Laboratory analysis of samples is the final confirmation step in identifying ACM. Only certified and licensed asbestos contractors can conduct asbestos surveys. Presumed ACM may not be considered non-ACM until confirmation from laboratory results.

7.1 BUILDING REVIEW

The first step in the asbestos identification and survey process is to review the building history to determine when the building was constructed. If the original building construction commenced on or after January 1, 1980, an asbestos survey is not required.

All buildings listed in [Section 4.1](#) of this manual must be surveyed prior to any work.

7.2 VISUAL INSPECTIONS

A visual inspection of the building by a qualified professional is used to quantify the amount and locations of ACM in the building if the suspect material is found to contain asbestos. Visual inspection information from confirmed ACM is then used to demarcate areas to be resurveyed periodically. Changes in the condition of the ACM can then be tracked over time. If the material is seen to be deteriorating, funding is requested for removal or repair, whichever best suits the situation.

7.3 BULK SAMPLING

A bulk sample is taken to ascertain a positive asbestos identification and assess the composition of any potential ACM. This sample is sent to an independent laboratory certified to analyze samples of this nature.

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 5 of 15
---------------------------------------	--------------------------------------	--	-------------------------



To avoid possible non-survey personnel exposure, the concern areas are sampled when not occupied whenever possible. Samples are collected by a certified individual from either EHS or an asbestos consultant.

7.4 LABORATORY ANALYSIS

Laboratory analysis is the final confirming step in identifying a substance as ACM. This entails the use of Polarized Light Microscopy (PLM) or Transmission Electron Microscopy (TEM), which will determine asbestos content from other building materials.

7.5 AIR SAMPLING

Air sampling is performed before, during, and after an asbestos abatement project and to monitor air, when needed, in the event of an accidental asbestos fiber release. Air samples are collected by a licensed asbestos consultant, then sent to an accredited laboratory, as are bulk samples. Results will be reported to EHS for evaluation and communication to affected personnel.

8.0 Regulatory Written Notification

The organizations listed below must be notified of large ACM projects.

8.1 EPA REQUIREMENTS

The U.S. EPA requires that an abatement contractor notify the EPA regional office ten business days prior to demolition or disturbance of ACM during a large ACM project. This notification must be in writing and must be updated if the amount of asbestos being abated changes by at least 20 percent.

8.2 NEW YORK STATE REQUIREMENTS

New York State requires that an abatement contractor notify the Department of Labor (DOL) ten calendar days prior to the abatement of a large ACM project. This notification must be in writing and must be accompanied by a fee, which is contingent on project specifications as established by DOL. The fee schedule can be found on the [DOL Asbestos Project Notification Form](#).

8.3 NEW YORK CITY REQUIREMENTS

8.3.1 ACP-7 Notification

New York City requires the abatement contractor to notify the Department of Environmental Protection (DEP) at least one week prior to the start of the project by filing an [ACP-7 notification](#).

Depending on the size of the project and the amount of asbestos to be abated, different fees, which are listed in the New York City DEP Asbestos Control Program, are required. Filing of an ACP-7 must allow sufficient time for the development, review, and signing of the form before work is scheduled to begin.

The ACP-7 requires the review and signature of the Abatement Contractor, Independent Monitor, Asbestos Coordinator (EHS), and the Executive Vice Provost.

8.3.2 Worksite Safety Plan

The development and submission of a worksite safety plan are required whenever abatement negatively impacts fire or life safety systems, such as sprinklers, alarms, or egress routes. A licensed Engineer or Architect must sign the plan.

This plan must be submitted to the DEP's Asbestos Technical Review Unit (A-TRU) and any other relevant city agency. This process may take up to six weeks to obtain approval, so sufficient time should be given to obtaining this permit prior to the commencement of abatement work.

8.3.3 ACP-9 Notification

If there are any deviations to RCNY Title 15/Code 56 procedures for abatement, the contractor must file an [ACP-9 form](#), which allows for a variance in the procedures of the project. This form must be submitted at least two weeks in advance of the proposed start date. Work may not commence prior to the approval of this variance.

DATE REVIEWED:	DATE UPDATED:	CLASSIFICATION & LOCATION:	PAGE:
May 24, 2021	May 24, 2021	General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	6 of 15



8.3.4 ACP-8 Notification

Any modification to the information provided on the ACP-7 (change of project dates, amount of ACM, location of project, contractor, owner, and/or air monitoring firm) must have an [ACP-8](#) filed 24 hours prior to the start of the project, or the applicable portion of the project that is being modified.

A single ACP-7 notification may be modified no more than twice. If more than two modifications are required, a new ACP-7 notification must be filed.

8.3.5 ACP-5 Notification

The asbestos consultant will submit an [ACP-5](#) for all work filed with the Department of Buildings or to EHS for non-filed work, in the event that:

- Asbestos is not present in the work area, or;
- Asbestos is present but will not be disturbed in the work area, or;
- Less than 25 LF or 10 SF of ACM will be disturbed, and the project is considered a “minor project,” as seen below.

8.4 SUMMARY OF NOTIFICATIONS

The following table provides a visual breakdown of the notifications required, based on the scale of the project.

Project Size	US EPA	NYS Code 56	NYC Title 15
<u>Large</u> ≥ 160 SF ≥ 260 LF	10 business days	10 calendar days	7 calendar days
<u>Small</u> > 25 LF, <260 LF > 10 SF, <160 SF	NONE	NONE	7 calendar days
<u>Minor</u> ≤ 25 LF ≤ 10 SF	NONE	NONE	NO, but ACP-5 may apply

8.5 POSTING OF NOTIFICATIONS

The abatement contractor must ensure that DOL-required notifications of abatement for large abatement projects are posted at least 10 days prior to the abatement. The written notification shall be posted at all entrances to the work area on the same floor, in adjacent spaces, by the elevator on the same floor, one floor above and below, and inside any elevators servicing the work area.

Postings for small and minor projects are not required; but remain optional depending on the specific circumstances and the judgment of EHS, the project manager, and the abatement contractor.

9.0 Types of Asbestos Work

The three types of asbestos work at WCM are as follows:

- Planned Asbestos Projects.
- Emergency Abatement Work.
- Operations and Maintenance Work (O&M).

9.1 PLANNED PROJECTS

Planned projects occur when an area is designated for renovation or construction. The Asbestos Survey/Abatement Process Flow for Projects is a process flow diagram (refer to [Appendix B](#)) that further illustrates this process.

The procedure for planned projects takes place as follows:

1. The Project Manager notifies EHS of the project, including written project scope and expected timeframe.

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 7 of 15
---------------------------------------	--------------------------------------	--	-------------------------



2. EHS conducts an initial assessment to determine if there is a potential asbestos project which requires further investigation:
 - If determined not to be a potential asbestos project, EHS will inform the Project Manager that they can proceed.
 - If an ACP-5 is required for a Department of Buildings filing, then an Independent Consultant will be assigned by EHS to survey, sample, and complete an ACP-5 form.
 - If determined to be a potential asbestos project, then EHS will designate an Independent Monitor to perform a complete survey for the project scope area as specified by the Project Manager.
3. The Independent Monitor performs a full survey of all areas that are potentially impacted by the project, prepares an asbestos survey report, and provides it to EHS and the Project Manager.
4. If asbestos is present, the Independent Monitor prepares asbestos abatement project specification documents (“bid documents”), which address abatement in all areas proposed for the project. These bid documents are submitted to EHS.
5. EHS provides the bid documents and a list of approved Asbestos Abatement Contractors to the Project Manager to initiate the bid and award process.
6. The Project Manager coordinates the abatement contract award process, including identification of the bidder list from the EHS-approved asbestos abatement contractor list, bid solicitation process with Independent Monitor, and awarding of the contract. Asbestos Abatement Contractors submit bid proposals to the Project Manager.
7. The Asbestos Abatement Contractor, Project Manager, Independent Monitor, and EHS establish a start date for the project. No work will begin until all parties are in agreement on the start date.
 - Requests to expedite any portion of the abatement process must be made in writing from the Project Manager to EHS.
8. EHS, Capital Planning, and the Independent Consultant complete all required filings initiated by the asbestos contractor.
9. EHS places Department of Labor required postings and internal postings 10 days prior to the start of the project.
10. The Project Manager is responsible for all shutdowns, hookups, and security notifications and communicates with EHS if shutdowns will affect fire and life safety operations.
11. The Independent Consultant oversees the Asbestos Abatement Contractor and monitors for compliance with all federal, state, and local requirements for asbestos activities. The Independent Consultant also keeps EHS and the Project Manager apprised of the asbestos abatement progress and/or related issues.
12. EHS visits and enters the work site as needed.
13. The Asbestos Abatement Contractor provides asbestos abatement close-out reports, including waste manifests with waste type and quantity to EHS. EHS must approve both the hauler and waste site where the waste is taken.
14. The Independent Monitor submits air monitoring and asbestos abatement close-out reports to EHS.
15. EHS maintains asbestos close-out documentation and other regulatory documentation.
16. If any additional asbestos work is needed during the course of the project, the project manager will coordinate work and all applicable filings with EHS.

9.2 EMERGENCY PROJECTS

In the event of an accidental asbestos fiber release episode, where fibers release from friable asbestos or non-friable asbestos material is rendered friable and releases fibers, **it is essential that all work operations cease and EHS is notified immediately.**

Accidental asbestos fiber release may be the result of a steam pipe explosion, a water line break or leak, or a fire, among other incidents. It is imperative that E&M, Capital Planning, and other departments affected be notified immediately. EHS will determine if the situation should be classified as an emergency and suggest the best course of action to be taken.

If necessary, an enclosure must be built with airtight walls, ceilings, or barriers around the ACM. The purpose of constructing an enclosure is to isolate ACM from building occupants and the building environment. The following steps must be taken to minimize the risk of exposure to asbestos fibers in emergency scenarios.

9.2.1 Emergency Procedure

In the event of an emergency, EHS shall:

- Respond and investigate the release incident and surrounding work area.
- Close the area off immediately and restrict access except for clean-up personnel.
- Contact an approved asbestos abatement contractor and consultant.
- Prepare a site and situation-specific Emergency Asbestos Resolution Plan.
- Coordinate the notification of regulatory agencies by the asbestos abatement contractor.

DATE REVIEWED:	DATE UPDATED:	CLASSIFICATION & LOCATION:	PAGE:
May 24, 2021	May 24, 2021	General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	8 of 15



- Notify the EPA if more than one pound of ACM is released into the environment, which may result in exposure to employees, tenants, or visitors, as per the Comprehensive Environmental Response, Compensation, and Liability Act.
- Allow re-occupancy of the area once final air monitoring verifies safe occupancy.

9.3 OPERATIONS AND MAINTENANCE

EHS has developed an operations and maintenance program to track and monitor those areas where asbestos-containing materials are present and to institute a repair program that ensures the safety of all personnel who access these areas.

9.3.1 Notification

- Mechanical Equipment Rooms and other areas that contain visible asbestos will have signs indicating the presence of ACM. These signs will be placed on the ACM itself.
- A sampling strategy will be developed to identify all sampled material as either non-asbestos or ACM.
- Signs will be posted to notify occupants of scheduled asbestos abatement projects in adjacent areas, including the type and quantity of the material being abated.
- E&M will notify EHS if:
 - Previously unknown ACM is found; or
 - Work needs to be done which involves the disturbance of potential ACM; or
 - Damaged ACM is found in the area where personnel will be or are currently working.

9.3.2 Surveillance

- All areas that contain visible ACM will be regularly surveyed to assess the condition of the material on a scheduled basis.
- ACM in poor condition will be remediated as soon as possible or repaired in such a way that reduces the likelihood of accidental release.
- Any department, in-house staff, or Project Manager (notified by contractors) that observes damaged ACM must notify EHS as soon as possible.

9.3.3 Work Practices

- No intentional disturbance of ACM is allowed by WCM personnel and contractors. **Only an approved licensed asbestos abatement contractor may conduct asbestos abatement.**
- Entrance to the asbestos work site before and during abatement can only be done by qualified designated individuals wearing the appropriate personal protective equipment.
- EHS must be notified for any maintenance work that may disturb ACM.
- For accidental disturbance of ACM, emergency procedures must be followed (see [Section 9.2](#)).
- Stripping and cleaning of vinyl asbestos tiles using floor buffers will only be conducted using wet methods and speeds below 300 rpm.
- Prior to work in crawl spaces or above ceiling areas that contain ACM (those that have been identified as containing spray-on insulation), EHS should be contacted to evaluate the space. Before work is to proceed, the area should be blocked off, and methods used to prevent migration of fibers outside the space. After work, the affected portions of the ceiling should be replaced.

10.0 Training

EHS provides Asbestos Awareness training for E&M, Custodial Services, and Facilities Development on an annual basis.

Training for other departments will be provided as needed.

Contractors are responsible for providing training to their employees.

11.0 Record Retention and Availability

EHS will maintain all reports from surveys, monitoring and abatement project reports, and training reports and records.

EHS will also distribute reports and associated documents to all appropriate personnel when requested or required.

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 9 of 15
---------------------------------------	--------------------------------------	--	-------------------------



Workforce Health and Safety will maintain records of medical surveillance reports related to asbestos and respiratory protection. These records must be retained for 30 years after the employee’s last date of employment.

11.1 PROGRAM REVISIONS

The Asbestos Program will be reviewed annually, and changes will be made if any deficiencies are identified during the annual review. Updates to the federal, state, or city rules and regulations regarding asbestos-containing materials and associated projects and tasks will also trigger a review of the Program. Any necessary revisions will be made during the program review, and updates will be reflected in the update history.

12.0 Definitions

- **Abatement:** all procedures physically taken to control fiber release from asbestos-containing materials. This includes removal, encapsulation, enclosure, and repair.
- **Abatement Activities:** all activities related to asbestos removal: from the initiation of work area preparation, through successful clearance air monitoring performed at the conclusion of an asbestos project or minor project.
- **Aggressive Sampling:** a method of sampling in which the individual collecting the air sample creates activity by the use of mechanical equipment during the sampling period, to stir up settled dust and simulate activity in that area of the building.
- **Air Sampling:** the process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure used for asbestos air sampling follows the NIOSH Standard Analytical Method 7400, or the provisional transmission electron microscopy methods developed by the USEPA and/or National Institute of Science and Technology, which are utilized for lower detectability and specific fiber identification.
- **Ambient Air Sampling:** the measurement of airborne asbestos fiber concentrations outside, but in the general vicinity of, the work site.
- **Area Air Sampling:** any form of air sampling or monitoring where the sampling device is placed at a stationary location.
- **Asbestos:** any hydrated material silicate separable into commercially suitable fibers, including but not limited to chrysotile (serpentine), amosite, crocidolite, tremolite, anthophyllite, and actinolite.
- **Asbestos-Containing Material (ACM):** asbestos or any material containing more than 1% asbestos.
- **Asbestos-Containing Waste Material:** asbestos-containing material requiring disposal.
- **Asbestos Contaminated Object:** any object contaminated by asbestos.
- **Asbestos Handler:** an individual certified to disturb, remove, encapsulate, repair, or enclose asbestos material.
- **Asbestos Supervisor:** an individual certified to supervise the handlers during asbestos projects and ensure that safety procedures are being followed.
- **Asbestos Investigator:** an individual certified by the DEP as having satisfactorily demonstrated his/her ability to identify the presence and evaluate the condition of asbestos.
- **Asbestos Inspector:** an individual certified by the DOL as having satisfied his/her ability to sample and evaluate the presence of asbestos.
- **Asbestos Project:** any form of work performed in connection with the alteration, renovation, modification, or demolition of a building or structure which will disturb (e.g., remove, enclose, encapsulate) more than 25 linear feet or more than 10 square feet of asbestos-containing material
- **Authorized Visitor:** the building owner and his/her representative, and any representative of a regulatory agency having jurisdiction over the project.
- **Clearance Air Monitoring:** the employment of aggressive air sampling technique, with a volume of air collected to determine the airborne concentration of residual fibers. This monitoring is performed as the final abatement activity.
- **Commissioner:** the commissioner of the NYC Department of Environmental Protection.
- **Contractor:** any public authority or any other governmental agency or instrumentality thereof, self-employed person, company, unincorporated association, firm, partnership, or corporation which engages in an asbestos project or employs individuals engaged in an asbestos project(s).
- **Demolition:** the partial or total dismantling of a building, including all operations for which a demolition permit from the NYC Buildings Department is required.
- **DEP:** the New York City Department of Environmental Protection.
- **Disturb:** any action taken to alter, change or stir ACM, such as its removal, encapsulation, or repair.
- **ELAP:** the Environmental Laboratory Approval Program administered by the NYS Department of Health.

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 10 of 15
---------------------------------------	--------------------------------------	--	--------------------------



- **EPA:** the U.S. Environmental Protection Agency.
- **Fiber:** an acicular single crystal or a similarly elongated polycrystalline aggregate that displays some resemblance to organic fibers by having such properties as flexibility, high aspect ratio, silky luster, axial lineation, and others; and which has attained its shape primarily through growth rather than cleavage.
- **Fixed Object:** an object which cannot be removed from the work area.
- **Friable Asbestos:** any asbestos or ACM that can be crumbled, pulverized, or reduced to powder when dry, by hand or other mechanical pressure.
- **HEPA Filter:** a high-efficiency particulate air filter capable of trapping and retaining 99.97% of particles greater than 0.3 micrometers.
- **HEPA Vacuuming:** vacuuming equipment with a HEPA filter.
- **Large Asbestos Project:** a project involving the disturbance of greater than or equal to 260 linear feet or 160 square feet of ACM.
- **Minor Project:** a project involving the disturbance of less than or equal to 25 linear feet or 10 square feet of ACM.
- **NIOSH:** the National Institute for Occupational Safety & Health.
- **NYSDOH:** the New York State Department of Health.
- **NYSDOL:** the New York State Department of Labor. This office administers Code 56.
- **OSHA:** the U.S. Occupational Safety & Health Administration.
- **Personal Protective Equipment (PPE):** includes, but is not limited to gloves, eye protection, footwear, headgear, and respiratory protection.
- **Phase Contrast Microscopy (PCM):** the measurement protocol for the assessment of fiber content in the air. (NIOSH Method 7400).
- **Polarized Light Microscopy (PLM):** the measurement protocol for the assessment of the asbestos content in bulk materials.
- **Project Monitor:** any person (other than the asbestos contractor or an employee or agent thereof) who oversees the scope, timing, phasing, and/or remediation methods to be utilized on any asbestos project. This individual must possess a valid project monitor certificate and have such certificate or a copy thereof in his/her possession at all times while working on the project.
- **Removal:** the stripping of any asbestos-containing materials from surfaces or components of a facility, or taking out structural elements as stipulated in 40CFR 61 Subparts A and M.
- **Renovation:** the addition, alteration, change, or modification of a building or the service equipment thereof that is not classified as an ordinary repair as defined in §27-125 of the Administrative Code of the City of New York.
- **Repair:** the corrective action using specified work practices, e.g., glove bag or plastic tent procedures to minimize the likelihood of fiber release from minimally damaged areas of ACM.
- **Replacement Material:** any material used to replace ACM that contains less than .01 percent asbestos.
- **Small Asbestos Project:** a project involving the disturbance of more than 25 and less than 260 linear feet of ACM, or more than 10 and less than 160 square feet of ACM.
- **Transmission Electron Microscopy (TEM):** the measurement protocol for the assessment of the asbestos fiber content of the air.
- **Variations:** permission applications from the regulating agency stating that, for specific reasons, the regulations as they are written need to be altered due to the particular situation. In order to be granted a variance, the requestor must demonstrate why procedures cannot be followed as written. Copies of all variations must be conspicuously posted.
- **Visible Emissions:** any emissions containing particulate material that is visually detectable without the aid of instruments.
- **Work Areas:** designated rooms, spaces, or areas of the building or structure where asbestos abatement activities take place. For glove bag procedures, the work area shall also include the areas contiguous to where the procedure takes place.
- **Worker:** an asbestos handler and/or asbestos handler supervisor.

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 11 of 15
---------------------------------------	--------------------------------------	--	--------------------------



13.0 References

- Occupational Safety and Health Administration (OSHA)
 Construction Standard (29 CFR1926.1101), General Industry Standard (1910.1001).
<http://www.osha.gov/SLTC/asbestos/index.html>
- Environmental Protection Agency (EPA)
 National Emissions Standards for Hazardous Air Pollutants (40 CFR Part 61).
<http://www.epa.gov/ttn/atw/eparules.html>
- New York State
 Industrial Code Rule 56 (12NYCRR Part 56).
<https://dol.ny.gov/system/files/documents/2021/03/icr56.pdf>
- New York City
 RCNY Title 15, Chapter 1.
https://www1.nyc.gov/html/gbee/downloads/pdf/dep_rule_title_15_ch.1.pdf

DATE REVIEWED:	DATE UPDATED:	CLASSIFICATION & LOCATION:	PAGE:
May 24, 2021	May 24, 2021	General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	12 of 15



Appendix A- Required Asbestos Certifications

PERSONNEL CERTIFICATIONS

The following personnel Certifications are required as part of the Asbestos Management Program in order to perform asbestos-related work at WCM facilities.

Function	Required Certificate
Bulk Sampling	<ul style="list-style-type: none"> • NYSDOL Asbestos Inspector • NYCDEP Asbestos Investigator
Air Monitoring During Abatement	<ul style="list-style-type: none"> • NYSDOL Asbestos Air Sampling Tech
Abatement Project Design	<ul style="list-style-type: none"> • NYSDOL Project Designer
Project Monitoring	<ul style="list-style-type: none"> • NYSDOL Asbestos Project Monitor
Removes Asbestos-Containing Materials	<ul style="list-style-type: none"> • NYSDOL Asbestos Handler/Supervisor • NYCDEP Asbestos Handlers License
Supervisor of ACM Removal	<ul style="list-style-type: none"> • NYSDOL Asbestos Supervisor, • NYCDEP Asbestos Supervisors License

COMPANY / CONTRACTOR CERTIFICATIONS

The following regulatory (NYSDOL, NYCDEP, NYSDEC, ELAP, NVLAP, NYSDOH, and US EPA) certifications are required by consultants or companies that perform asbestos-related work at WCM facilities.

Function	Required Certificate
Asbestos Abatement Contractor:	
Company	<ul style="list-style-type: none"> • NYSDOL Asbestos Contractors Handling License
Personnel	<ul style="list-style-type: none"> • NYSDOL Asbestos Handler/Supervisor
Crew Supervisor	<ul style="list-style-type: none"> • NYSDOL Asbestos Supervisor
Asbestos Consultant (Air Monitoring):	
Company	<ul style="list-style-type: none"> • NYSDOL Asbestos Contractors Handling License
Personnel	<ul style="list-style-type: none"> • NYSDOL Asbestos Project Monitoring and/or • NYSDOL Asbestos Air Sampling Tech

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 13 of 15
---------------------------------------	--------------------------------------	--	--------------------------



LABORATORY CERTIFICATIONS

All laboratories must be able to demonstrate proof of accreditation as required by NIOSH in order to analyze bulk or air samples taken from WCM facilities.

Function	Required Certificate
Polarized Light Microscopy (PLM) (Bulk Samples)	<ul style="list-style-type: none"> PAT program for PLM Analysis NYSDOH ELAP for solid and hazardous waste (PLM asbestos)
Transmission Electron Microscopy (TEM) (Non-friable organically bound bulk samples)	<ul style="list-style-type: none"> PAT program for TEM Analysis ELAP for solid and hazardous waste (PLM asbestos) NIST NVLAP for analysis of asbestos fibers ELAP for air and emissions (PCM2 analyte fibers and TEM analysis for asbestos fibers)
Phase Contrast Microscopy (PCM)	<ul style="list-style-type: none"> PAT program for PCM analysis ELAP for air and emissions (PCM2 analyte fibers and TEM analysis for asbestos)
Lab Analyst	<ul style="list-style-type: none"> NIOSH 582 certificate

WASTE HAULERS / LANDFILL REQUIREMENTS

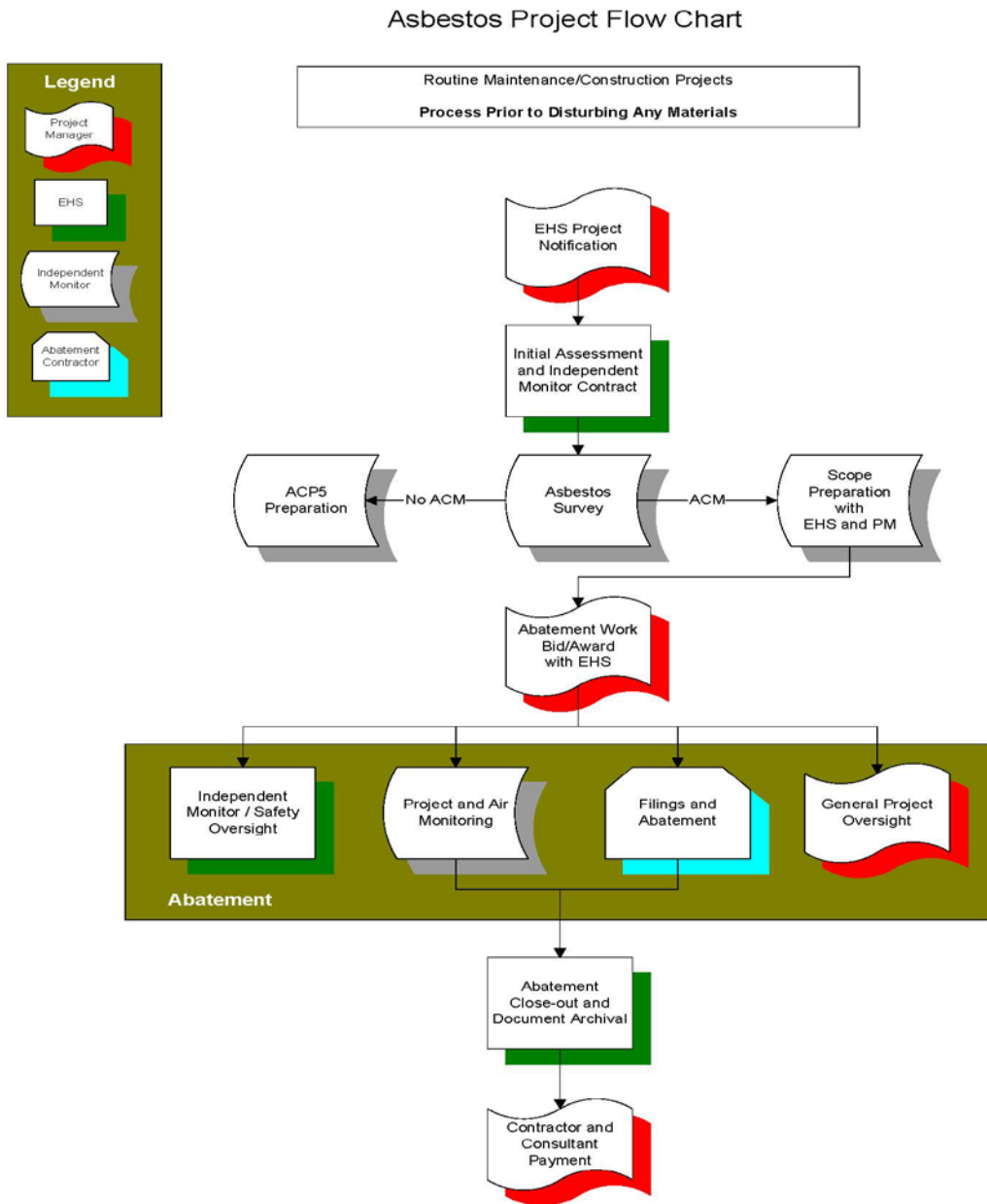
All haulers and landfills contracted by WCM to manage asbestos waste must demonstrate proof of the following accreditations from local, state, and/or federal agencies:

Function	Required Certificate
Asbestos Waste Hauler	<ul style="list-style-type: none"> NYSDEC Waste Transporter Permit DOT Permits
Asbestos Waste Landfill	<ul style="list-style-type: none"> EPA approved landfill When applicable, landfill must have local authorization/approval

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 14 of 15
---------------------------------------	--------------------------------------	--	--------------------------



Appendix B – Asbestos Project Flow Chart



July, 2007
G:\admin\visio\asbestos_flow.vsd

DATE REVIEWED: May 24, 2021	DATE UPDATED: May 24, 2021	CLASSIFICATION & LOCATION: General Safety, Occupational Safety T:\Documentation\EHS-Manual\7.5_Asbestos_Management.docx	PAGE: 15 of 15
---------------------------------------	--------------------------------------	--	--------------------------