

ASBESTOS AND LEAD BASED PAINT
OPERATIONS AND MAINTENANCE PROGRAM
FOR GENERAL SERVICES

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INTRODUCTION

This Operations and Maintenance (O&M) Program establishes the City of Newport News' policy for managing potential exposures to asbestos-containing building materials (ACBM) or lead based paint (LBP) present in buildings owned and leased by the City.

This plan has been developed to comply with the OSHA Construction Asbestos Standard, 29 CFR 1926.1101, OSHA Construction Lead Standard, 29 CFR 1926.62, OSHA General Safety and Health provisions, 29 CFR 1926.20, and the U.S Department of Housing and Urban Development (HUD) Guidelines for the Control of Lead-Based Paint Hazards in Housing.

The specific intent of this O&M Program is to protect the health and safety of building occupants, visitors, custodial staff, and maintenance personnel while in City owned and leased buildings. This Program is designed to:

1. Ensure that no asbestos fibers, lead paint vapors, chips, or dust are released into occupied areas by minimizing disturbance or damage to surfaces that contain asbestos or LBP.
2. Clean up any ACBM or LBP surfaces previously disturbed or damaged.
3. Monitor the condition of ACBM or LBP materials until the materials can be removed.

In the event that ACBM or LBP are to be disturbed building occupants, custodial staff, and maintenance or service personnel will notify the Environmental Services Supervisor, or his designated representative, at 269-2730 for further instructions.

The Environmental Services Supervisor, or his designated representative, will be responsible for determining whether the suspect material is indeed asbestos or lead containing, and what further actions are required before work can be continued.

In the event that ACBM or LBP is disturbed building occupants, custodial staff, maintenance or service personnel will immediately stop what they are doing and notify the Environmental Services Supervisor or his designated representative for further instructions.

The implementation and observance of this O&M Program will control and prevent the release of airborne asbestos or lead during normal and emergency work activities.

This Program will be in effect until all ACBM and/or LBP is removed from City owned and leased buildings.

The effective date of this O&M Program was April 1, 1996 and is being amended as needed for re-issue January 12, 2021.

**PROCEDURES FOR DISTURBING ASBESTOS AND LEAD DURING
MAINTENANCE, RENOVATION AND DEMOLITION ACTIVITIES**

All scheduled work in City buildings requiring the disturbance or removal of ACBM or LBP will only be performed after or before normal City employee work or duty hours. Normal weekday work hours in City office buildings are from 8:00 A.M. to 5:00 P.M. Non-emergency work around ACBM or lead containing materials will not occur during these hours without prior authorization from the Environmental Services Supervisor or his designated representative.

GENERAL WORK AREA PREPARATION:

The immediate area below, in or around where the asbestos or lead work will take place shall be carefully cleaned with a HEPA vacuum cleaner prior to moving or covering any furniture, fixtures, flooring, etc.

1. The prepared work area shall be isolated and secured with warning signs to preclude any unauthorized building occupants or visitors access to the floor area while the work is in progress.
2. The prepared work area shall be considered to be a "regulated" site or area. Asbestos and Lead warning signs shall be displayed at each "regulated" area. These warning signs shall be posted at all approaches and entrances to the "regulated" areas so that employees may read the signs and take the necessary precautions so as to not enter the work area. All asbestos and lead warning signs shall be approximately 14 by 20 inches in size and bear the following information:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

3. In addition to posted asbestos and lead warning signs, the prepared work area shall be roped or taped off to keep unauthorized persons out of the work area. Labels reading "ASBESTOS DANGER" or "LEAD WARNING" shall be attached to the rope or tape at intervals of approximately every 5 feet.
4. The area below, in or around the immediate work area shall be cleared of as much office furniture and equipment as practical.

5. Those furnishings that cannot be moved shall be HEPA vacuumed and wet wiped before tightly wrapping in 6 mil thick polyethylene (poly) sheeting and taped with duct tape or equivalent to avoid possible contamination.
6. Polyethylene sheeting shall then be placed over the entire floor area.
7. After all furnishings have been moved or wrapped, the entire heating, ventilation, and air conditioning (HVAC) system for the building shall be shut down and locked out for the entire period during which the work is taking place, and until the completion of all air sampling.

TYPES OF ASBESTOS WORK:

1. Sprayed on fireproofing
2. Acoustical plaster on surfacing materials
3. Repair of Pipe insulation
4. Glove bag removal of pipe insulation
5. Ceiling tiles
6. Non-friable asbestos containing materials
7. Disposal of asbestos waste
8. Cable Pulls

PROCEDURES FOR SPRAYED-ON FIREPROOFING ABOVE CEILING TILES and ASBESTOS CONTAINING CEILING TILES

The following procedures are to be followed by City contractors and those trained personnel who are required to work with asbestos containing ceiling tiles, above any suspended ceiling, or in other areas where sprayed-on fireproofing containing asbestos may be present in City owned or leased buildings.

1. Each ceiling tile shall be removed or slid over as carefully as possible to minimize ACM disturbance and asbestos fiber entrainment into the air.
2. The first tile removed shall be vacuumed with a HEPA vacuum and wet wiped to remove any ACM on top of the tile panel.
3. Before any more tiles are removed, the HEPA vacuum shall be used to vacuum up any dust or debris on top of the panels while they are still in place. As these tiles are removed, each tile shall be vacuumed again and wet wiped once they are removed from the grid system. All grid work shall be HEPA vacuumed and wet wiped after the tiles are removed and before any maintenance action begins.
4. Extreme caution shall be exercised while working above the suspended ceiling so as to not disturb or damage the sprayed-on ACM.
5. If any of the ACM is disturbed or damaged and falls onto either the in-place tiles or the floor, it shall be collected using the HEPA vacuum and the area shall be wet wiped immediately.

6. As minimum an amount of sprayed-on fireproofing as possible will be disturbed during any work above the suspended ceiling.
7. When removing the ACBM from around fixed objects like electrical boxes, speakers, light fixtures, etc., the nozzle of the HEPA vacuum must be held as close as possible to the ACBM being scraped off so that as much as possible of the ACBM is pulled into the vacuum cleaner and not allowed to fall onto the floor or top of the remaining in-place ceiling tiles.
8. The sprayed-on fireproofing must first be lightly wetted with amended water prior to being scraped and vacuumed to minimize asbestos fiber release. Care must be exercised not to use too much water since excess water will appreciably shorten the life expectancy of the HEPA filters in the vacuum as well as cause the fireproofing to delaminate due to increased weight.
9. When pulling computer cables, electrical wires, etc., above the suspended ceiling tiles, extreme caution should be exercised to prevent the cables or wires to rub against the fireproofing on the upper decking or on columns while going around columns and beams. A direct line of sight where the cable or wires are to be run must always be maintained even if this requires more ceiling tiles to be removed. Common sense and caution must always prevail when pulling cable or wire if ACBM disturbance is to be kept to a minimum.
10. After the work above the ceiling tiles has been completed, all visible dust and debris within reach shall be HEPA vacuumed off all horizontal surfaces such as in-place ceiling tiles, light fixtures, etc. These areas shall then be wet wiped to ensure maximum removal of any remaining ACBM.
11. After wet wiping the horizontal surfaces, those areas where the fireproofing was removed or disturbed shall be lightly sprayed with a penetrating encapsulant along with all of the cleaned horizontal surfaces.
12. After thoroughly cleaning the area above the ceiling tiles, the ladders, scaffolding, and polyethylene sheeting on the floor is HEPA vacuumed and wet wiped to remove any ACBM.
13. After thoroughly cleaning the area and equipment below where the ceiling tiles were removed, the pre-cleaned tiles may be replaced. Replacing the ceiling tiles shall be performed as carefully as possible to minimize vibrations along the suspended ceiling which may result in fiber release into unprotected office areas.
14. After replacing the removed ceiling tiles, the entire area below the replaced tiles, along with the ladders and scaffolding, must be HEPA vacuumed and wet wiped again to clean-up any remaining asbestos debris. All wet rags shall be placed in an asbestos waste disposal bag.
15. The polyethylene sheeting on the floor is again HEPA vacuumed and wet wiped as a final precaution. The polyethylene sheeting may now be removed and disposed of as non-asbestos-containing waste or trash.
16. Damaged asbestos containing and contaminated ceiling tiles shall be placed in properly labeled waste disposal bags.

PROCEDURES FOR REPAIR OR REMOVAL OF ASBESTOS-CONTAINING ACOUSTICAL PLASTER OR SURFACING MATERIALS

The following procedures are to be followed by those City employees or contractors, who must remove or repair troweled-on or sprayed-on acoustical plaster materials to prevent further damage of ACBM or mitigate a potential health hazard.

1. The immediate area below where the work is to be performed shall be carefully cleaned with a HEPA vacuum, and covered with two layers of 6-mil thick polyethylene sheeting.
2. Air tight barriers constructed of 6-mil polyethylene shall be erected to isolate the space from the remainder of the building.
3. Repair of acoustical plaster shall be accomplished by first misting the surface to be repaired with amended water. The plaster surface shall then be encapsulated and repaired with a suitable patching material. As little plaster material shall be disturbed as possible. If small amounts of plaster material require removal, the material shall be scraped with the nozzle of the HEPA vacuum as close as possible to the material to catch it as it is being dislodged. Any material that falls will be bagged with an emphasis on minimal fiber release. The HEPA vacuum shall be used to collect all small debris produced as a result of repair operations. All rough edges shall be sealed with a penetrating encapsulant, then patched if necessary.
4. After the work has been completed, all visible dust and debris within the polyethylene barriers shall be HEPA vacuumed off all horizontal surfaces such as in-place ceiling tiles, light fixtures, etc. These areas are then wet wiped to ensure maximum removal of any remaining ACBM. After wet wiping the horizontal surfaces, those areas where the plaster was removed or disturbed shall be lightly sprayed again with a penetrating encapsulant along with all of the cleaned horizontal surfaces.
5. After thoroughly cleaning the work area and any other horizontal surfaces, the ladders, scaffolding, and polyethylene sheeting on the floor is HEPA vacuumed and wet wiped to remove any ACBM. The polyethylene sheeting is also sprayed with a penetrating encapsulant.
6. After thoroughly cleaning the area and equipment, the polyethylene barriers shall be dismantled and disposed of as asbestos waste.

PROCEDURES FOR REMOVING PIPE INSULATION

The Environmental Services Supervisor or his designated representative, must authorize the removal of pipe insulation containing asbestos prior to such removal.

The ACBM removal will be kept to as minimum an amount as necessary to repair or replace the damaged or leaking pipe, valve, etc.

Removal of ACBM from pipes, elbows, valves, etc., shall be accomplished using glove bags specifically designed for this type of removal. Only trained personnel will be allowed to perform glove bag operations.

PROCEDURES FOR USING GLOVE BAGS

1. Glove bag removals shall never be performed on hot pipes since most glove bags will melt above 150°F.
2. Glove bags shall not be used in areas which are already heavily contaminated with deteriorated ACBM.
3. After the ACBM has been removed from the pipe, valve, etc. and wet wiped, spray a penetrating encapsulant over the cleaned areas before removing the glove bag from the pipe.
4. Glove bags shall never be re-used. After the sealed glove bag is removed from the pipe, it is placed in a 6-mil thick asbestos waste bag for disposal.
5. After the glove bag has been properly disposed of in the asbestos waste bag, the worker may remove his disposable coveralls and respirator. Uncontaminated coveralls may be discarded as non-hazardous waste.
6. Glove bags shall be smoke tested prior to any removal to ensure the proper seal has been attained.

MAINTENANCE ON NON-FRIABLE ASBESTOS-CONTAINING MATERIALS

This section applies to all trained personnel required to remove or handle non-friable asbestos-containing materials.

Non-friable materials include Transite board used as exterior siding, shingles, soffits, cooling tower vanes and window panels; vinyl asbestos floor tiles and mastics; and roofing materials to include felts, tars, and caulking.

VINYL FLOOR TILE and SHEET GOODS

Vinyl floor tile within all buildings is always assumed to contain asbestos if it has not been previously analyzed to prove that it does not contain asbestos. All vinyl tile requiring removal to allow for renovation of a City owned or leased building shall be sampled prior to the start of the project to determine if it is asbestos containing. Samples shall be analyzed by an AIHA accredited laboratory using the EPA recommended method of polarizing light microscopy (PLM) supplemented with dispersion staining. Tiles which do not contain asbestos are exempt from the requirements of this section.

1. Vinyl asbestos tile (VAT) shall not, under any circumstances, be sanded, drilled, grinded, sawed, or abraded by mechanical pressure means without the implementation of specific engineering controls to prevent the emission of airborne asbestos fibers.
2. Removal of vinyl asbestos tile shall be performed in accordance with the procedures in the O&M Plan.
3. Scrapers shall be utilized to loosen the tiles.
4. Debris shall be double-bagged in labeled bags for disposal if it becomes friable.

5. The floor shall then be cleaned using wet methods or a HEPA vacuum. The entire floor area shall be encapsulated with a bridging encapsulant.
7. Horizontal surfaces shall be wet wiped to remove any dust.

TRANSITE PANEL REMOVAL FROM BUILDING EXTERIORS

The Environmental Services Supervisor or his designated representative will ensure that proper safety and health precautions are in place prior to the removals as found in these O&M Program recommendations.

The Environmental Services Supervisor will be responsible for taking breathing zone and general area samples in accordance with the protocols of this O&M Program.

Good work practices shall be employed at all times to ensure minimal disturbance and damage to the ACBM.

Only those trained personnel who have been previously cleared, and approved to work around ACBM will be allowed to remove Transite panels, or remain in the area when the panels are removed.

1. Scaffolding (if needed) shall be erected at the job site according to OSHA regulations with toe boards and side rails in place. Work will not be allowed without proper scaffolding. Employees will not erect scaffolding on unstable surfaces.
2. Panels shall be sprayed with a bridging encapsulant and allowed to dry overnight before being removed.
3. Panels shall be removed one at a time, in one intact piece.
4. Bolts may be cut by torch or bolt cutter.
5. Loose or damaged pieces of Transite which fall to the ground shall be double bagged as asbestos waste immediately.
6. Panels shall be carefully lowered to the ground and wrapped in two layers of 10-mil polyethylene. Warning labels meeting OSHA requirements shall be affixed to each layer of polyethylene. Wrapped panels shall be stacked in a covered dumpster for transport to the landfill.
7. Fine debris suspected of containing asbestos shall be removed by HEPA vacuums and/or wet wiping techniques.
8. The clean-up of additional loose debris shall be at the discretion of the licensed worker.
9. Contaminated cloths shall be double bagged as asbestos waste in 6-mil disposal bags. As the work progresses, to prevent exceeding available storage capacity on site, sealed and labeled containers of asbestos-containing waste shall be removed and transported to the approved disposal site.

OTHER NON-FRIABLE MATERIALS

Asbestos is found in a variety of other building products and fixtures including fire doors, roofing

materials, gaskets, vibration dampers, fire resistant curtains, textiles, bathroom partitions, chalk boards, fire safes, etc. These materials, although not friable, may become damaged during renovations or demolitions and become friable thereby potentially creating a health hazard. The Environmental Services Supervisor shall be contacted for guidance in identifying asbestos-containing materials and to coordinate disposal of these materials. Demolition projects will be evaluated on a case by case basis to determine if an additional survey is required.

DISPOSAL OF ASBESTOS WASTE

Asbestos waste products will be disposed of in accordance with all NESHAPS and Commonwealth of Virginia Regulations.

1. All waste material will be transported in accordance with all applicable regulations. All waste material shall be double bagged and labeled as required by law.
2. Disposal must occur at an authorized disposal site in accordance with regulatory requirements of NESHAP and applicable regulations of the Commonwealth of Virginia.
3. All dump receipts, trip tickets, transportation manifests or other documentation of disposal shall be maintained by the Department of General Services in a permanent file. The recordkeeping format utilizes a chain-of-custody form, which includes the names and addresses of the generator, contractor, pick-up site, disposal site, the estimated quantity of asbestos waste, and the type of containers used. The form is to be signed by the generator, the contractor, and the disposal site operator, as the responsibility for the material changes locations. If a separate hauler is employed, his name, address, telephone number, and signature must also appear on the form.

EMPLOYEE PROTECTION AND WORK SITE PREPARATION OF LBP ACTIVITIES

All persons, maintenance, custodial, contracted or otherwise associated with lead work in City owned or leased buildings will be required to have training, and/or certification to do any lead work.

Those contractors or employees that will be involved in lead work, maintenance, renovation, abatement including soil removal and demolition on or in, City owned or leased property are required to have a written lead plan per 29 CFR 1926.62 and shall leave proof of current lead training and/or certification at the office of the Environmental Services Supervisor. Additionally, those contractors who generate 220 pounds or more of lead waste or who store 2200 pounds or more at a single site of lead containing waste and debris will verify to the Environmental Services Supervisor that disposal requirements with the appropriate state agency have been met. Contractors creating hazardous or non-hazardous waste should use safe work practices that will prevent the spread of dust and debris outside the work area.

Training and certification associated with lead work in City owned and leased buildings includes:

1. Identification of LBP
2. Risk Assessment of LBP
3. Abatement
4. Component removal and replacement
5. Demolition

Those City owned or leased buildings which may contain LBP and any public buildings built prior to 1978 to include museums, airport terminals, office buildings, any commercial buildings to include warehouses, factories and garages, structures such as bridges and water towers.

This section of the O&M manual is designed to guide occupants, maintenance personnel, contractors and all others that will be associated with maintenance, repair, renovation and demolition of City owned or leased buildings which are known to have LBP, in the safe management of LBP. These procedures will help to:

1. Control the creation of lead dust.
2. Control scattering of lead dust.
3. Clean-up LBP dust and debris created by the work being done.
4. Protect those associated with LBP activities in City owned or leased buildings.

All City maintenance, custodians or affected personnel shall observe the following environmental and worksite preparation procedures before commencing work in or on a LBP area.

DEFINITIONS

Asbestos – A naturally occurring mineral. Asbestiform minerals included in this group are chrysotile, amosite, actinolite crocidolite, tremolite and anthophyllite.

Asbestos Containing Materials - Any material that contains greater than 1% asbestos. Materials may include heat resistant clothing, automotive brake and clutch linings, and a variety of building materials including fireproofing, ceiling tile, floor tile, roofing shingles and felt as well as fire-resistant drywall and asbestos-cement pipe and sheet vinyl. Asbestos is also present in pipe and boiler insulating materials and fireproofing materials located on beams, in crawlspaces, and between walls.

Abatement - A measure or a set of measures designed to permanently eliminate LBP hazards or LBP. Waste from abatement activities may be similar to those found on construction, demolition, and renovation sites. Waste generated from abatement sites do not meet the routine maintenance criteria, thus they are subject to RCRA laws implemented by the state.

Bare Soil - Soil not covered with grass, sod, some other similar vegetation, or paving, including sand boxes.

Friable Asbestos - The potential for an asbestos containing product to release breathable fibers

depends on its degree of friability. **Friable means that the material can be crumbled with hand pressure.**

Lead - Includes metallic lead, all inorganic lead compounds, and organic lead soaps.

Lead Based Paint (LBP) - Any commercially manufactured paint for residential use containing greater than .06 percent by dry weight or any painted surface that results in greater than 1.0 mg/m² or 5,000 ug/g by weight (.5%).

Lead Dust - The attachment of lead to the surface of household or demolition dust resulting from surface friction, stripping, peeling, scraping, banging, chipping of LBP surfaces or structures. Lead in soil can result from industrial applications or from building renovations or demolitions.

Demolition - The wrecking or taking out of any load-supporting structural member and any related razing, removing, stripping, encapsulation, alteration, repair or renovation of substrates or portions of building materials that contain asbestos or LBP.

High-Efficiency Particulate Air (HEPA) Filter - Means a filter capable of trapping and retaining at least 99.97 percent of all monodispersed particles of .3 microns in diameter or larger.

Regulated Area - Means a work area where airborne levels or concentrations of asbestos fibers or lead dust exceed or are expected to exceed the Permissible Exposure Level.

Employee Exposure - Means that employee exposure to airborne levels of asbestos or lead dust that would occur if proper respiratory protection were not used to prevent exposure.

Asbestos Fiber - Means a particulate form of asbestos 5 micrometers or longer, with length to diameter (aspect) ratio of at least three (3) to one (1).

Permissible Exposure Limit (PEL) - Means employee exposures should not exceed OSHA recommended limits as an 8 hour time weighted average (TWA).

Asbestos PEL - Means that persons should not be exposed to asbestos fibers greater than .1 f/cc (fibers per cubic centimeter) of air for an eight hour time weighted average (TWA).

Lead Action Level – Means that point at which a person is exposed and engineering controls must be initiated. The action level for lead is 30µg/m³ (micrograms per cubic meter) of air for an eight hour time weighted average (TWA).

Lead PEL - Means persons should not be exposed to lead particulate or lead dust in levels greater than 50 µg/m³ (micrograms per cubic meter) of air for an eight hour time weighted average (TWA).

Maintenance - Work intended to maintain adequate living and or working conditions in a dwelling or office, which has the potential to disturb LBP, asbestos or suspect LBP or asbestos.