

ASBESTOS TESTING AND SAMPLING CHECKLIST

<p>Instructions: Consultant should meet with the Campus and Fund at the work area(s) prior to completing this Checklist. At least two (2) meetings are required, one prior to Schematic Phase submission and the second at Pre-Bid, prior to advertising a construction contract for bidding. Meeting agenda is: 1) review scope of work in the work area(s); 2) review checklist and provide initial answers; 3) walk the work area and adjacent areas with the checklist and confirm the answers; 4) confirm that completed Checklist becomes the basis for the sampling and testing scope of services; 5) confirm that test results will be considered in Schematic Report, OR, if Pre-Bid, confirm extent of additional testing required for the scope being advertised.</p>		
<p><i>In addition to the requirements of Code Rule 56 (56-5.1 Asbestos Survey Requirements) as currently amended, the following items should be the minimum presumed asbestos materials (PACM) that are investigated and tested. In previously abated areas, spot check 5% of the area to confirm that all asbestos was actually abated and not encapsulated. Obtain daily log provided by previous abatement contractor, read each day's report and note where potential ACM may have been left in place for encapsulation. This includes roofs and re-sprayed fireproofing where special patching at sampling must be done. The firm performing the survey should allow sufficient time to meet with the Fund, the Consultant and the campus, to review all campus plans and records prior to the start of field work and to return to the site to measure and document quantities of ACM / PACM..</i></p>		
<p>Unless test results prove otherwise, answer "Yes" and show the material as presumed ACM in the documents. The Fund's preference is to buy abatement in the base bid rather than pay for it by change order.</p>		<p>COMMENTS</p>
<p>General A – Was work area previously abated? If yes, obtain and review the logs from the abatement supervisor for completeness of previous work. If logs suggest encapsulation, then take additional samples to confirm that abatement was actually completed.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	
<p>B– Is the existing work in buildings or structures for which original construction commenced on or after January 1, 1974 and exempt from the Asbestos Survey Requirements in 56-5.1?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	<p>If yes, testing and sampling is still required by the Fund.</p>
<p>C- Are there any concealed spaces in shafts, chases, behind walls, stud cavities, masonry cavities, electrical boxes, above ceilings, below floors, in construction void areas within the project area? If so, assume that such spaces contain PACM debris left there during previous work.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	
<p>D – In addition to sampling PACM material, are tests need to determine the strength of the PACM's adherence to the substrate?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	<p>Determine if the substrate must be removed during the abatement</p>
<p>1) Ceiling tile, including material containing vermiculite</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	
<p>a) Is there debris on top of ceiling?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	
<p>b) Acoustic material sprayed on ceilings (popcorn)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	
<p>2) Ceiling tile mastic (glue pucks)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	<p>Check for mastic under any material that appears to be adhered</p>
<p>3) Flooring - vinyl tile (if carpet, check underneath for tile flooring)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	<p>Check for multiple floors in all locations</p>
<p>a) Flooring ceramic tile check underneath tile flooring for cleavage membrane - take more than one sample)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	
<p>b) Flooring tile mastic check substrate under flooring for soundness</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	<p>Where wet abatement is needed to remove ACM adhered to elevated slabs, confirm pathways where water might flow and discuss constructability with the Fund and Campus.</p>

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c) Shower stall or other “wet” floor waterproofing	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
4) Insulation: Pipe, wall, etc. (including exterior piping)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
a) Heating, domestic hot water and other insulated Piping Systems	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Other insulated piping, such as roof drains	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Insulation at flues, kitchen ducts and other “hot” exhausts.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
d) hangers at insulated piping and ductwork	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Has batt insulation been lifted up to confirm if multiple layers exist?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
f) Debris on surfaces below piping / hidden below batts?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
g) Concealed piping in chases, walls, etc.? (Assume ACM unless tested. Estimate length, fittings, supports etc., per actual hidden condition)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
h) Mastic used to adhere insulation (glue pucks)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
i) Direct bury piping for steam, hot water, etc. below slabs or underground at the adjacent site.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
5) Plaster walls and/or ceilings	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
a) Finish coat	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Scratch coat	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Condition of substrate; voids in substrate that hold extra ACM?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
d) Soundness of substrate; will it need to be demolished with ACM?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Cavities in electrical boxes, chases, openings adjacent to plaster.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6) Caulking (also test for PCB content)		
a) Windows	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Doors including elevator doors	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Expansion Joints	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
7) Doors: Interior core of doors	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Check both rated and unrated doors
8) Any and all fireproofing, including re-spray after previous abatement.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
a) Check for overspray on decking between beams, on exterior walls between columns and other adjacent materials	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

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b) Are there gaps between materials where fireproofing could be lodged, such as roof deck overlaps, chases, slots, etc.?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Are there lintels and other architectural steel for soffits, overhangs, canopies, etc. that was fireproofed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
d) Is there other construction obstructing access to fireproofing that must be removed to enable abatement?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Any and all material containing vermiculite (test for ACM)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
f) Have voids in masonry walls, stud partitions, electrical boxes, and other voids be sampled for fireproofing debris?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
9) Any other mastics used with:		
a) Pavers	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Carpet	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Wall base	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
d) Ductwork joints	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Insulation (wall)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
f) Sound deadening insulation on elevators, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
g) Sound deadening insulation under sinks or other fixtures.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
h) Pipe insulation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
i) Chalkboards	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
j) Other areas where adhesive could have been used	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
k) Check soundness of substrate in a thru j; will any need to be demolished with ACM?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
10) Oakum in piping joints	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	See also Directive 1D-5 Lead Remediation
11) Wall/ceiling finish on GWB, drywall compound, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
12) Cellulose containing materials	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
13) Roofing and Waterproofing	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
a) Flashing, both roof and wall, and sealants	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Vapor barrier, both under roof and on below grade walls, areaways, tunnels, vaults and other underground structures	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Above grade cavity wall waterproofing	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

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d) Exterior below grade waterproofing and drainage pipe (Transite?)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Check soundness of substrate in 13 thru 13.d; will any need to be demolished with ACM?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
14) Electrical conductor fire wrap or insulation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
15) Orangeburg in ductbanks, exterior piping, including debris in manholes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
16) Equipment		
a) Internal insulation with equipment enclosure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Mastic and sealants inside equipment	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Refractory linings: Incinerators, boilers, water heaters, chimneys	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Also check for radioactivity in refractory materials
d) Gaskets and connectors	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Flexible connections to ductwork	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
g) Are there inaccessible portions of equipment? If yes, assume they contain concealed ACM.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
17) Transite		
a) Ductwork	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Fume hood interior and exhaust duct	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Countertops and sinks	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
d) Splines in precast panels	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Piping	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
f) Cabinet or perimeter heater assemblies?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
g) Others (List)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Confirm that all of the following locations have been inspected:</i>		
18) Contract work area including utility connection points	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
19) Route to Contract Work Area checked for exposed PACM	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
20) Chases, tunnels, and other concealed areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
21) Exterior paving toppings, such as tracks, tennis courts, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
22) Debris on top of ceiling tiles, below lay in insulation, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	



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23) Debris on ledges of shafts, interstitial spaces, etc. where ACM could have fallen during original installation or later work.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
24) Debris buried on site or under overhangs where ACM could have fallen during original installation or later work.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>Confirm that the following conditions have been assessed:</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
25) Friability of adjacent NIC asbestos	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
26) Tightness of adherence of ACM to non-ACM substrates (if ACM is tightly adhered, requiring removal of the substrate as ACM, has the thickness and extent of the substrate also been measured?)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
27) Dust which may contain ACM in rarely accessed areas and spaces (DO NOT USE ASTM D 5755; USE BULK SAMPLE AND PLM)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
a) Chases	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Perimeter enclosures	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) Electrical and Telecomm Manholes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
d) Crawl spaces	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Above ceilings	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
28) Background air samples of all significant work areas – can the areas be fully contained during abatement?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<i>List other conditions, issues, etc. that have been considered</i>		Attach the completed checklist to the project-specific Asbestos Survey Requirements for Building/Structure Demolition, Renovation, Remodeling and Repair transmitted to the Fund per 56-5.1(g) of Code Rule 56.
<p>Does the extent of sampling above provide sufficient information to determine ACM quantities? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>Construction Documents must provide sufficient information regarding the amount of ACM. In addition to sampling, provide services required to measure and document quantities of all material that test positive for ACM or are classified as PACM since they are inaccessible for testing.</p>		



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In order to avoid any possible violation of Federal or State law with respect to asbestos removal, no Fund project should hereinafter be bid in which asbestos is to be removed unless (1) all asbestos in the work area (any room, space, shaft, above ceiling plenum, wall cavity or any concealed, hidden space that might be accessed during the work OR open onto an adjacent work area without containment) involved is to be removed; or (2) there is a justifiable written reason for not removing all asbestos in the area involved; there is no loose asbestos material in the area involved that is not being removed; the contract documents specifically identify the asbestos material being left in place; and the contract documents specifically provide a satisfactory method for preventing the disturbance of asbestos material being left in place.

The Consultant confirms compliance with this policy: Yes No N/A