

**ASBESTOS TESTING AND SAMPLING CHECKLIST**

<p><b>Instructions: Consultant and Abatement Designer shall meet with the Campus and Fund at the work area(s) prior to completing this Checklist.</b></p> <p>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 availability of existing drawings and daily logs of prior abatement work in the work areas; 3) review checklist and provide initial answers based on historic knowledge; 4) 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 included in the Schematic Report, OR, if at Pre-Bid, confirm extent of additional testing required for the scope being advertised or reasonable assumptions regarding PACM that will be classified as ACM for bidding purposes. 6. Confirm if there is a Facility Wide Variance from the campus.</p>		
<p>In addition to the requirements of Code Rule 56 (56-5.1 Asbestos Survey Requirements) as currently amended, the following checklist items should be the minimum presumed asbestos materials (PACM) that are investigated and tested. <b>In previously abated areas, spot check 5% of the area to confirm that all asbestos was abated and not encapsulated.</b> Obtain daily log provided by previous abatement contractor from campus/SUCF archive, read each day's report and note where potential ACM may have been left in place for encapsulation. <b>This includes roofs and re-sprayed fireproofing where special patching at sampling must be done.</b> The firm performing the survey and sampling 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.</p>		
<p><b>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.</b></p>		<p><b>COMMENTS</b></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><b>If yes, testing and sampling in these buildings is still required by the Fund.</b></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>c) Is there a ceiling(s) above the visible ceiling?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>	<p>If yes or unknown, include removals to investigate</p>
<p>d) Lay in Ceiling materials</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>

**ASBESTOS TESTING AND SAMPLING CHECKLIST**

a) Flooring ceramic tile - <i>check underneath tile flooring for cleavage membrane - take more than one sample)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Flooring tile mastic - <i>check substrate under flooring for soundness</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	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.
c) Toilet, shower or other “wet” floor cleavage/waterproofing membrane	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
d) Wood flooring – check for cleavage membrane	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Synthetic flooring (also test for mercury)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
f) Asphalt Tile	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
4) Thermal Surface Insulation: Pipe, wall, etc. ( <i>including exterior piping</i> )	<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 non-pressure 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/fittings at insulated piping and ductwork	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) For batt/spray insulation, can it be peeled 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., i.e., can reasonable assumptions be made about piping runs needed to support existing fixtures and equipment? (Assume ACM unless tested. Estimate size, length, fittings, supports etc., per possible hidden conditions)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
h) Mastic used to adhere cavity 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	

**ASBESTOS TESTING AND SAMPLING CHECKLIST**

e) Cavities due to electrical boxes, chases, other substrate openings.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6) Caulking (also test for PCB content)		
a) Windows, doors, and louvers	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Control and expansion joints	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
c) other joints	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
7) Doors: Interior core of doors including elevator 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.		
a) Check for overspray on decking between beams, on exterior walls between columns and other adjacent materials. Overspray may be micro splatter and a careful examination must be made.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Are there gaps between materials where fireproofing could be lodged, such as metal 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) Are there voids in masonry walls, stud partitions, electrical boxes, and other construction below fireproofing that should be sampled for fireproofing debris that may have fallen from above?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
g) Fire Curtains and blankets?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
9) Any other mastics used for/with:		
a) Cavity wall damp proofing, lintel mastic, door and window frame mastic, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) Pavers, Carpet, and other non-PACM flooring	<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 adhesive (walls, soffits, etc.)	<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	



**ASBESTOS TESTING AND SAMPLING CHECKLIST**

h) Pipe insulation adhesive	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
i) Chalkboards or tackboard adhesive	<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, in 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 at slabs on grade, and below grade structures such as 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	
d) At exterior/interior below grade waterproofing, consider if drainage pipes exist (Transite?)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
e) Slip sheets under metal roofing/flashing	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
f) Check soundness of substrate in 13.a thru 13.e; will any need to be demolished with ACM if such ACM is tightly adhered?	<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) Transite (Orangeburg) in duct banks 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	
h) 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 in		



**ASBESTOS TESTING AND SAMPLING CHECKLIST**

a) Ductwork and louvers	<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/drainage lines both interior and exterior	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
f) Inside 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	

*Confirm that all of the following locations have been inspected:*

18) Contract work area including spaces with MEP utility connection routes/points	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
19) Check access route to Contract Work Area for exposed PACM that could be disturbed during access along the route	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
20) Have all chases, tunnels, and other concealed areas been considered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
21) Exterior paving toppings/coatings at tracks, tennis courts, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
22) Debris on top of suspended ceiling, below lay in insulation, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
23) Debris on/in 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	

*Confirm that the following conditions have been assessed:*

25) Friability of adjacent NIC asbestos or risk of likely disturbance. (Consider adding verbiage addressing "handling ACM" vs Abating ACM in specification to avoid likely disturbance.)	<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 like debris 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	
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	



**ASBESTOS TESTING AND SAMPLING CHECKLIST**

<i>List other conditions, issues, etc. that have been considered</i>	Project-specific Asbestos Survey Requirements for Building/Structure Demolition, Renovation, Remodeling and Repair per 56-5.1(g) of Code Rule 56. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
--	---

Does the extent of sampling proposed provide sufficient information to determine ACM quantities?  Yes  No  N/A

Construction Documents must provide sufficient information regarding the amount of ACM. If field conditions require additional sampling, then the ECA will be adjusted to pay for reasonable additional sampling and testing. 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.

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, Asbestos Project Designer, and Fund Coordinator confirms compliance with this policy by signing below:

Consultant name and firm: _____		Date
	Signature of Consultant	
Asbestos Project Designer name and firm: _____ DOL #, Expiration		Date
	Signature of Asbestos Project Designer	
Fund Coordinator name: _____		Date
	Signature of Coordinator	

Notes: