



From June 10, 2009 to June 12, 2009 air sampling for airborne asbestos fibers was conducted in select academic buildings across the Arizona State University Tempe Campus. Buildings were selected for sampling if they are known to contain friable asbestos-containing materials (ceiling tiles, sprayed-on acoustical ceiling material and/or structural fireproofing).

Buildings which were sampled consisted of: Physical Education East (ceiling tiles, sprayed-on acoustical ceiling material), Music Building East (fireproofing, acoustical ceiling material), Community Service Building (fireproofing, acoustical ceiling tiles), Armstrong (sprayed-on acoustical ceiling material), Business Administration North (fireproofing), Wexler Hall (fireproofing) and Durham Language & Literature (ceiling tiles & fireproofing).

Sprayed-on fireproofing is typically located within the return air plenums. Acoustical ceiling material is typically accessible and may be located on ceilings throughout the buildings. Ceiling tiles, located in a few buildings, are typically accessible and may be located throughout the buildings.

Air samples were collected by Dave Jagers, EH&S Asbestos Specialist, in select areas in accordance with the National Institute for Occupational Safety and Health (NIOSH), Method 7400. All air samples were collected in the breathing zones of representative areas (classrooms, offices, and corridors) normally occupied by students and ASU staff. All sampled areas are serviced by the building's HVAC systems, which were functioning normally during this air sampling task.

Samples were collected using 25 millimeter (mm) cassettes with 50 mm electrically conductive extension cowls and 0.8 micron pore size mixed cellulose ester filters. Air sampling was conducted passively with a minimum collection volume of 1,200 liters of air.

All samples were analyzed by Fiberquant Analytical Services, an NVLAP participating laboratory, in Phoenix, Arizona. All air samples were analyzed by Phase Contrast Microscopy (PCM), according to NIOSH 7400 Methods, and by Transmission Electron Microscopy (TEM) according to AHERA analytical protocols.

As a general result, PCM analysis indicates relatively low airborne fiber concentrations in each of the buildings sampled. Results in fibers per cubic centimeter (f/cc) ranged between less than detection limits and 0.005 f/cc, well below the OSHA Permissible Exposure Levels (PEL) of 0.1 f/cc. PCM analysis counts all fibers, asbestos and non-asbestos, greater than 5 microns in length with a length-to width ratio of 3:1.

The results of the samples analyzed by TEM were all "none-detected" for asbestos fibers. TEM analysis specifically identifies asbestos fibers greater than 0.3 microns in length with a length to width ratio of 3:1.

Based on the laboratory sample results, at the time of the air sampling, the areas that underwent air sampling do not appear to have any measurable concentrations of airborne asbestos fibers.

Sampling will be repeated in approximately 6 months, on or about December/January 2010.

The results of PCM and TEM laboratory results are as follows.

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**General Area Air Sampling Results**

<b>Date</b>	<b>Building</b>	<b>Location</b>	<b>Sample No.s</b>	<b>PCM (f/cc)</b>	<b>TEM (s/cc)</b>
6/10/2009	Armstrong	1st Floor, General Area, North Lobby - Return Air outside Rm. 109	ARM-61009-01	0.004	<0.005
6/10/2009	Armstrong	1st Floor, General Area, Rm. 140 - west	ARM-61009-02	0.005	<0.005
6/10/2009	Armstrong	2 <sup>nd</sup> Floor, General Area, Corridor outside Rms 208 & 209	ARM-61009-03	0.004	<0.005
6/10/2009	Armstrong	2 <sup>nd</sup> Floor, General Area, Rm 266	ARM-61009-04	0.001	<0.005
6/10/2009	Phys Ed East	Rm 139 (Gymnasium) - General Area	PEE-61009-01	0.001	<0.005
6/10/2009	Phys Ed East	Main Corridor South (Btwn doors of Rm 143) General Area	PEE-61009-02	<0.0007	<0.005
6/10/2009	Phys Ed East	North Lobby (East of Main Door)- General Area	PEE-61009-03	0.002	<0.005
6/10/2009	Phys Ed East	West Corridor (Across from Rm 135) - General Area	PEE-61009-04	0.002	<0.005
6/10/2009	Music Bldg East	5th Floor, Hall 565, Outside Rm 575	MB-61009-01	0.002	<0.005
6/10/2009	Music Bldg East	5th Floor Elevator Lobby 0861	MB-61009-02	0.003	<0.005
6/10/2009	Music Bldg East	3rd Floor, Room 323	MB-61009-03	0.002	<0.005
6/10/2009	Music Bldg East	3rd Floor Corridor, N of Elevator 0862	MB-61009-04	0.002	<0.005
6/10/2009	Music Bldg East	1st Floor Elevator Lobby 0862	MB-61009-05	0.002	<0.005
6/10/2009	Music Bldg East	1st Floor, Elevator Lobby 0861	MB-61009-06	0.005	<0.005
6/11/2009	Wexler	8th Floor, Corridor, across from A839	WX-61009-01	0.001	<0.005
6/11/2009	Wexler	7th Floor, Corridor, across from A739	WX-61009-02	0.0007	<0.005
6/11/2009	Wexler	6th Floor, Corridor, by A623	WX-61009-03	0.002	<0.005
6/11/2009	Wexler	5th Floor, Elevator Lobby	WX-61009-04	0.004	<0.005
6/11/2009	Wexler	4th Floor, Corridor, General Area, Across from A439	WX-61009-05	0.0008	<0.005
6/11/2009	Wexler	3rd Floor, Elevator Lobby	WX-61009-06	0.002	<0.005
6/11/2009	Lang & Lit	B Wing, 6th Floor Corridor, across from Rm 644J1	LL-61009-01	<0.0007	<0.005
6/11/2009	Lang & Lit	B Wing, 5th Floor Corridor, across from Rm 544J1	LL-61009-02	0.0008	<0.005
6/11/2009	Lang & Lit	B Wing, 4th Floor Corridor, across from Rm 444W1	LL-61009-03	0.0008	<0.005

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6/11/2009	Lang & Lit	C Wing, 4th Floor Corridor, south of Rm 411	LL-61009-04	0.001	<0.005
6/11/2009	Lang & Lit	B Wing 3rd Floor Corridor, outside of Rm 347	LL-61009-05	<0.0007	<0.005
6/11/2009	Lang & Lit	C Wing, 3rd Floor Corridor, outside Rm 306	LL-61009-06	<0.0007	<0.005
6/11/2009	Lang & Lit	B Wing, 2nd Floor Room 245	LL-61009-07	0.001	<0.005
6/11/2009	Lang & Lit	C Wing, 2nd Floor Corridor, across from Rm 216	LL-61009-08	0.0008	<0.005
6/11/2009	Lang & Lit	B Wing 1st Floor, Main Lobby by copier.	LL-61009-09	0.003	<0.005
6/11/2009	Lang & Lit	C Wing Basement, between Rms 5&7	LL-61009-10	0.0008	<0.005
6/11/2009	Bus Admin	3rd Floor Corridor Outside 301	BA-61009-01	0.0008	<0.005
6/11/2009	Bus Admin	3rd Floor Corridor Across from 318	BA-61009-02	0.002	<0.005
6/12/2009	CSB	Boiler Room North East by Fire Pump.	CSB-61009-01	0.002	<0.005
6/12/2009	CSB	Boiler Room South East by Sink	CSB-61009-02	0.001	<0.005
6/12/2009	CSB	1st Floor, SW Corridor, by Rm 123	CSB-61009-03	<0.0007	<0.005
6/12/2009	CSB	1st Floor, Elevator Lobby	CSB-61009-04	0.0008	<0.005