TABLE 1:
AIRBORNE CONCENTRATIONS OF ASBESTOS STRUCTURES OBSERVED DURING SIMULATIONS CONDUCTED AT THE NORTH RIDGE ESTATES SITE, KLAMATH FALLS, OREGON[a]

		Number of Observed Structures			Concentration of Observed Structures		
Simulation Type	**Analytical Sensitivity (s/cm^3)**	**Short Protocol Structures (Number)**	**Long Protocol Structures (Number)**	**7402 Fibers (Number)**	**Total Protocol Structures (s/cm^3)**	**Fraction Long Protocol Structures (%)**	**7402 Fibers (s/cm^3)**
Child's Play 3	6.8E-03	10	3	2	8.8E-02	23%	1.4E-02
Child's Play 4	1.5E-02	6	0	1	8.7E-02	0%	1.5E-02
Weed Trimming 2	3.1E-03	1	0	1	3.1E-03	0%	3.1E-03
Weed Trimming 3	2.9E-03	2	1	0	8.8E-03	33%	
Weed Trimming 4	3.1E-03	9	5	2	4.4E-02	36%	6.3E-03
Rototilling 1	3.3E-03	4	0	0	1.3E-02	0%	
Rototilling 2	3.3E-03	4	0	0	1.3E-02	0%	
UCL95[b]							<5.0E-3
Ambient during Child play	2.0E-03	0	0	0	0	0%	0
Ambient during Weed Trimming	1.8E-03	0	0	0	0	0%	0
Ambient during Rototilling	2.2E-03	0	0	0	0	0%	0

Notes:

[a] Source of data: Labcor, Inc. Report (dated: September 8, 2004), which contains the raw data. Transmitted by email from U.S.EPA. The above structure counts (and corresponding concentrations) are based on direct, manual inspection of the raw data. Note that all structures observed in these samples are chrysotile.

[b] Because 7402 structures were not detected in either of the samples analyzed to estimate exposure during rototilling, an upper bound estimate of concentrations is provided. The upper bound estimate is determined as three times the pooled analytical sensitivity for the two analyses (where three is the number of structures representing a 95% upper confidence limit to a count of zero structures, assuming counts are Poisson distributed, and the pooled analytical sensitivity is determined as the reciprocal of the sum of the reciprocals of the analytical sensitivities for the individual analyses performed).

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TABLE 2:
SUMMARY OF DUST MEASUREMENTS FROM SIMULATIONS CONDUCTED AT THE NORTH RIDGE ESTATES SITE, KLAMATH FALLS, OREGON[a]

Activity	Trial	Measured Activity Dust Level[b] (mg/m3)	Measured Background Dust Level[c] (mg/m3)
Child Play	1	3.8	0.08
	2	3.6	0.2
	3	5.96	0.39
	4	4.67	0.09
Weed-trimming	1	2.44	0.29
	2	0.81	1.74
	3	0.7	0.52
	4	0.79	0.9
Rototilling	1	4.2	0.47
	2	6.2	1.9
	3	5.13	0.68

Notes:

[a] Source: Transmitted by Email from U.S.EPA

[b] Averaged readings over time of each trial collected at waist height.

[c] Averaged over readings before and after time of each trial collected at waist height.

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TABLE 3:
CONCENTRATIONS OF ASBESTOS IN SOILS IN AREAS WHERE EPA SIMULATIONS WERE CONDUCTED AT THE NORTH RIDGE ESTATES SITE, KLAMATH FALL, OREGON

Simulation Area Sample Type	Sample ID	Fiber Type	Analytical Sensitivity ($s/\mu g_{PM10}$)	Number of Structures: Total Protocol Structures (Number)	Number of Structures: Long Protocol Structures (Number)	Number of Structures: 7402 Fibers (Number)	Concentrations of Structures: Total Protocol Structures ($s/\mu g_{PM10}$)	Concentrations of Structures: Fraction Long Protocol Structures ($s/\mu g_{PM10}$)	Concentrations of Structures: 7402 Fibers ($s/\mu g_{PM10}$)
Child's Play									
Grab Sample	202	Chrysotile	3.9	32	6	4	120	19%	15
Weed Trimming/Rototilling:									
Composite 1	200	Chrysotile	2.3	20	13	9	46	65%	21
		Amosite[a]		1	1	1	2.3	100%	2.3
Composite 2	201	Chrysotile	2.3	21	13	10	49	62%	23
Composite 2 Split	201D	Chrysotile	2.3	19	8	5	44	42%	12
Pooled[b]:									
Mean[c]		Chrysotile	0.77	60	34	24	46	56%	19
Mean[c]		Amosite	0.77	1	1	1	0.77	100%	0.77
UCL[d]		Amosite	0.77	4.8	4.8	4.8	3.7	100%	3.7

NOTES:

[a] Amosite was detected only in this single soil sample from the set analyzed as part of the EPA simulation study.

[b] Because the three soil samples collected in the area used for the weed trimming and rototilling simulations represent various types of duplicates of one another and because the analytical results from these samples are entirely consistent, the best estimate of concentrations in these soils can be gained by pooling the results from these samples.

[c] The mean of pooled results is estimated by (1) determining the pooled analytical sensitivity for the set of samples and (2) multiplying the total number of structures observed (summed among all of the samples) by the pooled analytical sensitivity. As indicated in the text, the pooled analytical sensitivity is equal to the reciprocal of the sum of the reciprocals of the analytical sensitivites of the individual samples included in the pooled set.

[d] An upper confidence bound (UCL) on amosite concentrations in these soils is estimated by multiplying the pooled analytical sensitivity of the samples collected in these soils by 4.8 which is the 95% UCL on the observation of a single structure, assuming counts of structures are Poisson distributed.

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TABLE 4:
RESULTS OF ANALYSIS OF BLANKS AND COMPARISON TO RESULTS FROM PROJECT SAMPLES FROM THE NORTH RIDGE ESTATES SITE, KLAMATH FALLS, OREGON

Environmental Medium	Sample Type	Sample ID No.	Sample Type	Number of Structures (Number)	Number of G.O.s (Number)	Area Scanned (mm^2)	Air Volume (L)	Analytical Sensitivity (s/L)	Surface Loading Sensitivity (s/mm^2)	
Soil										
	Blanks									
		S4	Lot Blank	0	10	0.101	NA		9.90	
		S5	Lab Blank	0	10	0.101	1510	2.52	9.90	
		S6	Lab Blank	1 [a]	10	0.101	1400	2.72	9.90	
		S7	Lab Blank	0	10	0.101	1200	3.18	9.90	
									Pooled[b]:	**2.48**
	Analytical Samples								**UCL[c]:**	**7.43**
		S1	Soil		140	1.41			0.71	
		S2	Soil		140	1.41			0.71	
		S3	Soil		103	1.04			0.96	
Air										
	Blanks	13	Lab Blank	1 [d]	4	0.0403	4702	2.03	24.81	
		14	Lab Blank	0	4	0.0403	5400	1.77	24.81	
		15	Lab Blank	0	4	0.0403	4310	2.22	24.81	
		16	Lot BlanK	0	10	0.1007	NA		9.93	
							Pooled[b,e]:	**0.66**		**4.51**
							UCL[c]:	**1.99**		**13.54**
	Analytical Samples									
		02	Air		83	0.97	56.8	7.01	1.03	
		04	Air		30	0.43	61.1	14.50	2.30	
		05	Air		83	1.20	105.1	3.05	0.83	
		07	Air		81	1.17	112.1	2.93	0.85	
		08	Air		82	1.19	103.7	3.12	0.84	
		10	Air		97	1.41	82.6	3.32	0.71	
		11	Air		98	1.42	81.3	3.34	0.70	

NOTES

[a] The structure detected in this sample was a short ISO structure.

[b] These are estimated surface loadings based on pooled results for the available blanks.

[c] These values represent an upper bound estimate of the observable surface loading achieved for blank samples. It is determined as the loading appropriate for the detection of three structures because three structures is the 95% upper confidence limit to observation of zero structures (based on a Poisson distribution).

[d] The structure detected in this sample was a short ISO fiber embedded in a long ISO structure matrix..

[e] The pooled analytical sensitivities for these samples were determined as the reciprocals of the sum of the reciprocals of the analytical sensitivities for the individual samples included in the pooled set.

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TABLE 5:
SAMPLE CHI-SQUARE CALCULATION TO TEST FOR THE CONSISTENCY OF STRUCTURE COUNTS OBSERVED ACROSS GRID SPECIMENS (SAMPLE FOR CHILD'S PLAY 3)

Gird Specimen Number	Total Structures Observed	Number of Gird Openings Scanned	Normalizing Factors	Total Structures Expected	(E-O)^2/E
A	5	28	0.333	4.33	0.103
B	5	29	0.345	4.49	0.058
C	3	27	0.321	4.18	0.332
Totals:	**13**	**84**	**1**	**13**	**0.493**

df = 2

critical value:= 5.99

Conclusions: Counts are consistent

Deposit is adequately uniform

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TABLE 6:
RESULTS OF CHI-SQUARE TESTS ACROSS GRIDS OF INDIVIDUAL SOIL OR AIR SAMPLES FROM THE NORTH RIDGE ESTATES SITE KLAMATH FALLS, OREGON

Sample Identification	Sample Type	Number of Structures	Chi-square Statistics		Counts Consistent?
			Critical Value	Total Structures	
Child's Play 3	Air	13	5.99	0.49	Yes
Child's Play 4	Air	6	5.99	2.83	Yes
Weed Trimmir	Air	2	5.99	1.02	Yes
Weed Trimmir	Air	3	5.99	2.42	Yes
Weed Trimmir	Air	14	5.99	1.12	Yes
Rototilling 1	Air	4	5.99	1.63	Yes
Rototilling 2	Air	4	5.99	1.42	Yes
Soil No. 200	Soil	22	9.49	9.61 [a]	No
Soil No. 201	Soil	22	9.49	4.87	Yes
Soil No. 201D\	Soil	19	9.49	6.74	Yes
Soil No. 202	Soil	32	7.81 [b]	7.35	Yes

NOTES:

[a] Although this sample fails the chi-square statistic at a significance level of 5%, it is by only a very small margin. Thus, for example, the sample passes at a significance level of 2.5% (critical value: 11.1).

[b] One of the grid specimens for this sample was apparently not analyzed, thus, only four realizations are included and the corresponding number of degrees of freedom is 3 (critical value: 7.81).

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TABLE 7:
ESTIMATED EXPOSURE CONCENTRATIONS AND THEIR ASSOCIATED RISKS FROM BOTH MODELED AND SIMULATED DATA FROM THE NORTH RIDGE ESTATES SITE, KLAMATH FALLS, OREGON

		Time Averaged Observed/Modeled Concentrations[a]				Estimated Risks	
Simulation Type *Source of Risk Estimate*	**Time Factor[b] (unitless)**	**Protocol Structures (s/cm^3)**	**Fraction Long Protocol Structures (%)**	**7402 Fibers (s/cm^3)**	**Asbestos Type**	**Protocol Structures (unitless)**	**7402 Fibers (unitless)**
Child's Play							
Simulation with soil report time estimates [c]	2.6E-02	2.3E-03	23%	3.8E-04	Chrys	9.E-05	9.E-05
Soil Report Modeling Estimates [d]	2.6E-02	3.0E-04 [e]	50%	1.3E-04	Mixed	8.E-05 [e]	3.E-05
Weed Trimming							
Simulation with new time estimates [f]	5.9E-04	2.6E-05	36%	3.7E-06	Chrys	3.E-06	8.E-07
THIS PATHWAY NOT PREVIOUSLY MODELED							
Rototilling							
Simulation with soil report time estimates [c]	8.2E-04	1.1E-05	0%	<4.1E-06 [g]	Chrys	1.E-06 [h]	<9.E-07 [g]
Soil Report Modeling Estimates [d]	8.2E-04	4.9E-04 [e]	50%	1.9E-04	Mixed	8.E-05 [e]	4.E-05

URF's

For Protocol Structures (from Berman and Crump 2001)

	Chrysotile	Amphibole
(for 23% Long)	0.04	
(for 36% Long)	0.07	
(for 50% Long)	0.098	7

For 7402 Structures (from IRIS 1988)

(for all 7402 structures)	0.23

Key:

Chrys means chrysotile

Mixed means combined chrysotile and amphibole

NOTES:

[a] The concentrations presented in these columns are time-averaged estimates derived as the product of the time-factor (indicating the ratio of the estimated duration and frequency of exposure for the specific scenario) and the maximum of the measured concentrations observed across trials within each simulated activity.

[b] The time factors indicated in this table are derived as the ratio of the product of the duration (number of years) and frequency (hours per day x days per year) of exposure (in hours) estimated for a particular exposure scenario and the number of hours in lifetime-continuous exposure.

[c] These are concentration and risk estimates derived using data from the EPA study (Table 1) and time estimates from Berman 2004. The maximum of the exposure concentrations observed across trials for each activity are employed in all cases to represent each specific activity evaluated.

[d] These are the concentration and risk estimates that were modeled and reported in Berman 2004.

[e] These modeled estimates include contributions from both chrysotile and amphibole asbestos. No amphibole asbestos was detected in any of the air samples collected during the EPA study.

[f] Because this pathway was not previously modeled, new time estimates were required. The weed trimming pathway assumes once per week for one hour during summer months: 1 hr/day*12 days/yr*30 years/(24 hrs/day*365 days/year*70years)

[g] Because no 7402 structures were detected during any of the rototilling trials, the concentrations estimated for these structures are upper bound estimates derived as described in Table 1.

[h] Although no long protocol structures were detected during any of the rototilling trials, the risk estimate for rototilling presented here assumes that 36% of protocol structures are long (longer than 10 µm), which is the fraction observed during weed trimming. Weed trimming trials were conducted in the same area as rototilling trials.

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TABLE 8:
COMPARISON BETWEEN MEASURED AND MODELED EXPOSURE CONCENTRATION ESTIMATES AND MODEL OPTIMIZATION
NORTH RIDGE ESTATES SITE, KLAMATH FALLS, OREGON

Scenario Data Type (Modeled Conditions Assumed)	Wind Velocity (m/s)	Moisture Content (mass %)	Silt Content (mass %)	Mass Handling Rate (Mg/hr)	Vechicle Speed (km/hr)	Width of Dispersion Box (m)	Mixing Height of Box (m)	Chrysotile Concentrations in Soil[a] Protocol Structures ($s/\mu g_{PM10}$)	Chrysotile Concentrations in Soil[a] Fraction Long (%)	Chrysotile Concentrations in Soil[a] 7402 Structures ($s/\mu g_{PM10}$)	Instantaneous Airborne Chrysotile Concentrations[b] Protocol Structures (s/cm^3)	Instantaneous Airborne Chrysotile Concentrations[b] Fraction Long (%)	Instantaneous Airborne Chrysotile Concentrations[b] 7402 Structures (s/cm^3)
Child's Play													
Measured[c]	**4.4**	**4.0**	**NR**	**0.18**	**NR**	**NDM**	**NDM**	**120**	**19**	**15**	**8.8E-02**	**23.0**	**1.5E-02**
Modeled[d]													
(Actual Field Conditions)	4.4	4.0	NR	0.18	NR	0.5	0.5	120	NR	15	2.8E-03	NR	3.6E-04
(Adjusted for Moisture Content)	4.4	0.3	NR	0.18	NR	0.5	0.5	120	NR	15	1.1E-01	NR	1.3E-02
(Adjustment for Mean Wind)	3.0	0.3	NR	0.18	NR	0.5	0.5	120	NR	15	9.5E-02	NR	1.2E-02
(Optimized Model)	**3.0**	**0.3**	**NR**	**0.2**	**NR**	**0.5**	**0.5**	**120 [f]**	**NR**	**70 [f]**	**1.1E-01**	**NR**	**6.2E-02**
(Original Model)	3.0	2.0	NR	0.125	NR	0.5	0.5	300 [e]	NR	130 [e]	1.2E-02	NR	5.0E-03
Rototilling													
Measured[c]	**4.4**	**NR**	**34**	**NR**	**1.6**	**NDM**	**NDM**	**46**	**56**	**19**	**1.3E-02**	**0.0**	**<5.0E-03**
Modeled[d,g]													
(Actual Field Conditions)	4.4	NR	34	NR	1.6	3	1.8	46	NR	19	2.2E-01	NR	9.1E-02
(Adjusted for Dispersion)	4.4	NR	34	NR	1.6	60	1.8	46	NR	19	1.1E-02	NR	4.4E-03
(Adjustment for Mean Wind)	3.0	NR	34	NR	1.6	60	1.8	46	NR	19	1.6E-02	NR	6.7E-03
(Optimized Model)	**3.0**	**NR**	**38**	**NR**	**1.6**	**30**	**1.8**	**120 [f]**	**NR**	**70 [f]**	**9.4E-02**	**NR**	**5.5E-02**
(Original Model)	3.0	NR	38	NR	3.2	3	1.8	19 [h]	NR	7.2 [h]	6.0E-01	NR	2.3E-01

Notes: "NR" means not relevant for the model. "NDM" means not determined by measurement. For details: see Berman (2004).

[a] Unless otherwise indicated, these represent best estimate chrysotile concentrations observed among soil samples collected to represent source concentrations for the EPA simulation of the indicated activity (Table 4).

[b] These represent measured or modeled chrysotile exposure estimates for the indicated activity. They are "instantaneous" because the concentrations occur while the activity is actually being conducted under the conditions indicated. Thus, these estimates must be adjusted before they can be considered to represent time-integrated exposures.

[c] Values in these rows were determined by measurement during the EPA simulation study.

[d] The instantaneous airborne concentrations presented in each row of this section were estimated by inputting the indicated values for each input parameter presented in the row into the corresponding model described for this activity in Berman (2004). In addition to the input parameters listed in the table, a value of 0.35 is also used for "k" (the particle size multiplier. This is the value recommended in the literature to adjust the model for respirable-sized particles (see Berman 2004). Derivation of the values indicated for the width and mixing height of the dispersion box are discussed in the text.

[e] These are the highest concentrations (with contributions from embedded ACM included) that were observed in any soil sample collected at any time at the North Ridge Estates Site.

[f] Because these models are currently being used to assess short term exposure and risk, these are the highest concentrations observed in the soil component (i.e. with contributions from embedded ACM excluded) of any soil sample collected at any time from the North Ridge Estates Site.

[g] In addition to the values for the input parameters indicated, a value of 32 is used for the value of the Thornswaite PE index, which is an additional input required for the rototilling model. This value an EPA recommended value derived from the literature (USEPA 2002).

[h] These are the highest concentrations observed in the soil component of any soil sample (i.e. with contributions from embedded ACM excluded) prior to completion of the EPA simulation study.

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TABLE 9:
MEASURED AND MODELED EXPOSURE CONCENTRATIONS AND THEIR ATTENDANT RISKS
NORTH RIDGE ESTATES SITE, KLAMATH FALLS,OREGON

Fiber Type	Scenario	Instantaneous Airborne Asbestos Concentrations[a] Protocol Structures (s/cm^3)	Fraction Long (%)	7402 Structures (s/cm^3)	Time Factor[b]	Time Averaged Asbestos Concentrations[c] Protocol Structures (s/cm^3)	Fraction Long (%)	7402 Structures (s/cm^3)	Unit Risk Factors[d] for: Protocol Structures	Early Exposure Adjustment Factor[e]	for: 7402 Structures	Estimated Risk for: Protocol Structures[f]	for: Adjusted Protocol Structures[g]	for: 7402 Structures[f]
Chrysotile														
	Child's Play													
	Measured[h]	**8.8E-02**	**23**	**1.5E-02**	0.026	2.3E-03	23	3.9E-04	0.040	1.5	0.23	9.E-05	1.E-04	9.E-05
	Optimized Model[i]	1.1E-01	23	6.2E-02	0.026	2.8E-03	50	1.6E-03	0.098	1.5	0.23	3.E-04	4.E-04	4.E-04
						FOR ONE YEAR EXPOSURE:			***0.098***	***1.6***	***0.23***	***3.E-05***	***5.E-05***	***5.E-05***
	Rototilling													
	Measured[h]	1.3E-02	36	5.0E-03	0.00082	1.1E-05	50	4.1E-06	0.070	1.1	0.23	7.E-07	8.E-07	9.E-07
	Optimized Model[i]	9.4E-02	36	5.5E-02	0.00082	7.7E-05	50	4.5E-05	0.098	1.1	0.23	8.E-06	8.E-06	1.E-05
						FOR ONE YEAR EXPOSURE:			***0.098***	***1.6***	***0.23***	***9.E-07***	***2.E-06***	***1.E-06***
Amosite														
	Child's Play													
	Measured[h]	ND	ND	ND	0.026	ND	ND	ND	7	2.8	0.23	ND	ND	ND
	UCL	<1.4E-02	50	<1.4E-02	0.026	<3.6E-04	50	<3.6E-04	7	2.8	0.23	<3.E-03	<7.E-03	<8.E-05
	Optimized Model[j]	3.5E-03	50	3.5E-03	0.026	9.2E-05	50	9.2E-05	7	2.8	0.23	6.E-04	2.E-03	2.E-05
						FOR ONE YEAR EXPOSURE:			***7***	***3.6***	***0.23***	***8.E-05***	***3.E-04***	***3.E-06***
	Rototilling													
	Measured[h]	0.0E+00	0	0.0E+00	0.00082	ND	ND	ND	7	1.3	0.23	ND	ND	ND
	UCL	<5.0E-03	50	<5.0E-03	0.00082	<4.1E-06	50	<4.1E-06	7	1.3	0.23	<3.E-05	<4.E-05	<9.E-07
	Optimized Model[j]	3.1E-03	50	3.1E-03	0.00082	2.6E-06	50	2.6E-06	7	1.3	0.23	2.E-05	2.E-05	6.E-07
						FOR ONE YEAR EXPOSURE:			***7***	***3.6***	***0.23***	***4.E-07***	***1.E-06***	***1.E-08***

NOTES:

[a] Derived as described in Table 8.

[b] Derived for the corresponding scenario as described in Berman (2004) and presented in Table 15 of that report.

[c] Determined simply by multiplying the instantaneous concentration by the corresponding time factor.

[d] Derived as described in Berman (2004) and presented in Table 18. For protocol structures, values vary as a function of mineral type and fraction of such structures that are are longer than 10 µm. The value used for 7402 structures was initially obtained from IRIS (1988).

[e] These are adjustments to assure that the full effects of exposures that occur early in life are adequately addressed. For a detailed description of their derivation, see Appendix A.

[f] Calculated as the product of the time-averaged exposure and the corresponding unit risk factor.

[g] Calculated as the product of the time-averaged exposure and the corresponding unit risk factor and then multiplied by the early exposure adjustement factor.

[h] These are exposure and risk estimates derived from exposure concentrations observed during the EPA study of simulated residential activities.

[i] These are exposure and risk estimates that are modeled using optimized models (Table 8) with the maximum asbestos concentrations observed in soil samples used as inputs.

[j] Because amphibole asbestos structures were not observed in any of the air samples analyzed as part of the EPA study, these exposure and risk estimates are based on upper confidence bound estimates for observation of zero structures. The values presented are three times the pooled analytical sensitivities for the set of measurements from each activity simulated. This is based on the expectation that structure counts are Poisson distributed, that the 95% upper confidence limit on an observation of 0 structures is 3 structures (for Possion distributed counts), and that the concentration of any set of samples is simply equal to the number of counts multiplied by the pooled analytical sensitivity for that set of samples.

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TABLE 10:
LOCATIONS AND RELATIVE ABUNDANCE OF AMPHIBOLE ASBESTOS STRUCTURES OBSERVED AT THE NORTH RIDGE ESTATES SITE, KLAMATH FALLS, OREGON

Data Type / *Data Set* / Fiber Type	Sample Location[a]	Number of Samples (Number)	Fraction ACM[b] (g/g)	Number of Structures: Short[c] Protocol Structures (Number)	Long[d] Protocol Structures (Number)	7402 Fibers (Number)	Long[e] ISO Structures (Number)	Short[f] ISO Structures (Number)
Air								
Ambient Air								
Total Asbestos		46	NA	**1**	**2**	**4**	**7**	**3**
Amphibole	A	1	NA			**1**	**1**	
EPA Simulation Air								
Total Asbestos		7	NA	**34**	**11**	**6**	**46**	
Amphibole		0						
Soil								
Composites and Hot Spots								
Total Asbestos		18		**47**	**33**	**91**	**106**	
Amphibole	L[g]	1	0.15	**2**	**2**	**8**	**9**	
EPA Residential								
Total Asbestos		12		**2**	**3**	**3**		**80**
Amphibole	R	2	0.014	**0**	**0**	**0**		**1**
	Y		0	**0**	**0**	**0**		**1**
Glove Box[h]								
Total Asbestos		12		**ND**	**ND**	**29**	**29**	**681**
Amphibole	L	1	0.0012	**ND**	**ND**	**3**	**3**	**1**
EPA Simulation Soils								
Total Asbestos		4		**42**	**40**	**28**	**95**	
Amphibole	MBK[i]	1	0.0099	**0**	**1**	**1**	**2**	
Total								
Total Number of Asbestos Structures							**283**	**764**
Total Amphibole Asbestos Structures							**15**	**2**
Percent Amphibole							**5%**	**0.3%**
Percent (excluding Hot Spot Sample)							**3%**	**0.3%**

NOTES: "NA" means not applicable. "ND" means not determined.

[a] Except as noted, codes indicated for sample location identifiers are defined in the air report (Berman 2003 - **CHEC**

[b] This is the mass fraction of ACM observed in the soil matrix from which the indicated sample was collected.

[c] Short protocol structures are those between 5 and 10 µm in length (for significance, see text).

[d] Long protocol structures are those longer than 10 µm (for significance, see text).

[e] Long ISO structures are those longer than 5 µm.

[f] Short ISO structures are those shorter than 5 µm.

[g] This is a grab sample collected at Hot Spot No. 6 (see Berman 2004).

[h] The glove box data set represents the same sample set as the EPA Residential data set except that these results are obtained from the analysis of samples prepared using the glove box method (**REFERENCE**)

[i] The simulations were conducted on an unnoccupied parcel of land currently owned by MBK.

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