Appendix D

Respicon, Cascade Impactor, pDR-1000, and Climet CI-500
Data for Each Individual Subject

Table D-1. Concentration by particle diameter (µm) as measured by the Respicon Air Sampler (mg/m^3)[a,b]

Aerodynamic Diameter	<4	4–10	10–100	Total
Subject 1	<DL	<DL	1.03	1.90
Subject 2	<DL	<DL	1.54	2.42
Subject 3	<DL	<DL	<DL	1.32
Subject 4	<DL	<DL	1.75	2.63
Subject 5	<DL	<DL	<DL	1.32
Subject 6	1.06	1.25	1.69	4.00
Subject 7	<DL	<DL	<DL	1.32
Subject 8	<DL	<DL	1.23	2.11
Background[c]	<DL	<DL	<DL	1.32

[a]DL (Detection Limit) = 0.878 mg/m^3.
[b]½ DL was used in place of the <DL results for the purpose of calculating the total concentration.
[c]Based on measurements taken late at night when no students were present in building.

Table D-2. Concentration by particle diameter (µm) as measured by the Cascade Impactor Air Sampler (mg/m^3)[a,b]

Aerodynamic Diameter	0.5–2	2.0–4.0	4.0–8.0	8.0–16	16–32	>32 µm	Total
Subject 1	<DL	0.02	0.06	0.02	0.06	0.18	0.35
Subject 2	<DL	0.04	0.03	0.05	0.02	0.31	0.47
Subject 3	0.06	0.08	0.19	0.15	0.13	0.39	0.99
Subject 4	<DL	<DL	0.03	0.05	0.05	0.22	0.37
Subject 5	<DL	<DL	<DL	<DL	<DL	0.10	0.13
Subject 6	<DL	0.04	0.08	0.14	0.10	0.23	0.61
Subject 7	0.04	0.05	0.11	0.12	0.06	0.15	0.51
Subject 8	<DL	0.03	0.07	0.11	0.10	0.31	0.64
Background[c]	<DL	<DL	<DL	<DL	0.017	0.085	0.13

[a]DL (Detection Limit) = 0.015 mg/m^3.
[b]½ DL was used in place of the <DL results for the purpose of calculating the total concentration.
[c]Based on measurements taken late at night when no students were present in building.

Table D-3. Particle concentration as measured by the pDR-1000 Air Sampler (mg/m^3)

	Mean	Maximum	Minimum
Subject 1	0.75	8.42	0.047
Subject 2	0.57	8.33	0.016
Subject 3	0.30	0.84	0.093
Subject 4	0.14	0.81	0.027
Subject 5	0.049	0.27	0.019
Subject 6	1.22	7.70	0.078
Subject 7	0.32	3.51	0.080
Subject 8	0.34	5.14	0.015

Table D-4. Concentration by particle diameter (µm) as measured by the Climet CI-500 Air Sampler (mg/m^3)[a]

Physical Diameter	0.3–0.5	0.5–1.0	1.0–2.5	2.5–5.0	5.0–10	>10.0	Total
Subject 1	0.001	0.005	0.026	0.222	0.560	1.499	2.313
Subject 2	0.001	0.002	0.016	0.166	0.535	1.747	2.467
Subject 3	0.002	0.009	0.058	0.411	1.214	3.756	5.450
Subject 4	0.002	0.003	0.013	0.124	0.323	0.964	1.429
Subject 5	0.008	0.002	0.003	0.025	0.055	0.167	0.260
Subject 6	0.011	0.006	0.029	0.260	0.679	1.746	2.731
Subject 7	0.005	0.010	0.054	0.377	0.631	0.817	1.895
Subject 8	0.006	0.004	0.021	0.186	0.578	1.878	2.672
Background[b]	0.009	0.005	0.002	0.010	0.010	0.019	0.055

[a]Concentration calculations assume particle density of 2.6 g/cm^3.
[b]Based on measurements taken late at night when no students were present in building.

Table D-5. Average concentrations by particle diameter ranges (µm) measured by the Cascade Impactor Air Sampler (mg/m^3)[a,b]

Aerodynamic Diameter	0.5–2	2.0–4.0	4.0–8.0	8.0–16	16–32	>32	Total
Subject 9 Session 1	0.004	<DL	0.004	0.008	0.007	0.024	0.049
Subject 9 Session 2	<DL	<DL	0.005	0.007	0.008	0.024	0.046
Subject 9 Session 3	0.004	0.008	0.012	0.013	0.020	0.044	0.102
Subject 9 Session 4	<DL	<DL	0.004	0.005	0.009	0.053	0.073
Subject 9 Session 5	0.007	0.008	0.004	0.026	0.026	0.081	0.152
Subject 10 Session 1[c]	0.019	0.034	0.075	0.079	0.075	0.198	0.480
Subject 10 Session 2[c]	0.005	0.015	0.034	0.052	0.040	0.092	0.237
Subject 10 Session 3	0.011	0.018	0.047	0.054	0.032	0.079	0.241
Background[d]	0.004	<DL	0.003	0.006	0.004	0.005	0.023

[a]DL (Detection Limit) = 0.0025 mg/m^3.
[b]½ DL was used in place of the <DL results for the purpose of calculating the total concentration.
[c]Concentration not adjusted for presence of dog.
[d]Based on measurements taken late at night when no students were present in building.

Table D-6. Concentration by particle diameter ranges (µm) measured by the Climet CI-500 Air Sampler (mg/m^3)[a]

Physical Diameter	0.3–0.5	0.5–1.0	1.0–2.5	2.5–5.0	5.0–10	>10.0	Total
Subject 9 Session 1	0.008	0.003	0.005	0.026	0.042	0.070	0.155
Subject 9 Session 2	0.010	0.005	0.003	0.014	0.027	0.058	0.117
Subject 9 Session 3	0.006	0.004	0.005	0.026	0.054	0.124	0.220
Subject 9 Session 4	0.012	0.007	0.011	0.055	0.113	0.240	0.439
Subject 9 Session 5	0.011	0.008	0.004	0.018	0.026	0.048	0.115
Subject 10 Session 1[b]	0.018	0.015	0.067	0.353	0.746	1.430	2.629
Subject 10 Session 2[b]	0.003	0.005	0.031	0.172	0.367	0.700	1.278
Subject 10 Session 3	0.006	0.008	0.039	0.181	0.341	0.656	1.231
Background[c]	0.012	0.009	0.003	0.011	0.012	0.016	0.064

[a]Concentration calculations assume particle density of 2.6 g/cm^3.
[b]Concentration not adjusted for presence of dog.
[c]Based on measurements taken late at night when no students were present in building.