



December 9, 2019

School District of Philadelphia  
Office of Environmental Management & Services  
440 N. Broad Street  
Suite 373  
Philadelphia, PA 19130

**ATTENTION:** Mr. Brian Joseph

**REFERENCE:** Dust Monitoring  
Benjamin Franklin High School – ULCS #2010  
550 North Broad Street, Philadelphia, PA  
Criterion's Project Number: **192440**

Dear Mr. Joseph,

On December 2, 3, 4, 5 and 6, 2019, Ms. Lauren Mitchell of Criterion Laboratories, Inc. (Criterion) conducted particulate dust monitoring in and around various construction areas at Benjamin Franklin High School.

The dust monitoring was conducted using the Met One Aerocet-531S Mass Particle Counter/Dust Monitor. This monitor measures PM 1, PM 2.5, PM 7, PM 10 (respirable dust) and Total Dust. The results for this monitoring are attached to this report.

### **Current Federal Regulations**

Occupational Safety and Health Administration (OSHA) has set a limit of 5 milligrams/cubic meter (mg/m<sup>3</sup>) for PM 10 (respirable dust) and 15 mg/m<sup>3</sup> for Total Dust.

The American Conference of Governmental Industrial Hygienists (ACGIH) has set a threshold limit value (TLV) over an average 8 hour work day over a 40 hour work week of 10 mg/m<sup>3</sup> for Total Dust.

The Environmental Protection Agency (EPA) sets a limit of 35 mg/m<sup>3</sup> for PM 2.5 over a 24 hour period and 150 mg/m<sup>3</sup> for PM 10 over a 24 hour period.

### **Baseline Levels**

On September 21, 2019, baseline levels of various particulates were established while the school was empty of all students, staff and construction personnel. The highest baseline levels recorded outside the work area for PM 10 (respirable dust) and Total Dust plus 50% of this initial highest reading will be used to compare dust levels to the non-construction areas for the remainder of the project.

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If the PM 10 or the Total Dust level of dust is found to be higher than the following baseline levels, corrective action must be taken to prevent continued elevated dust levels.

The baseline level to be used for comparison is 0.277mg for PM 10 and 0.413 mg for Total Dust (TD).

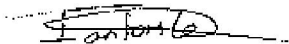
### **Conclusion**

Various readings for PM10 and Total Dust collected throughout the building on all the days sampled were found to be above the previously established baseline. The workers have been cutting concrete in none dust controlled areas, air filtration devices have been shut down, and plastic sheeting has been cut and removed. The technician stopped work when the above items were found, turned air filtration devices back on and when appropriate had Delta reinstall plastic sheeting to the various work areas. The technicians contacted the cleaners and scheduled the various areas to be cleaned as appropriate.

All other readings collected during the week of December 2 to December 6, 2019 were found to be below the baseline level and within the OSHA ACGIH, EPA limits.

Should you have any questions or concerns, please feel free to contact me at (215) 244-1300, extension 1033.

Sincerely,



Ian Forster  
Project Manger

Attachment

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

2-Dec Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	8:56	0.0006	0.002	0.009	0.013	0.017	
1st floor elevator lobby	8:02	0.001	0.005	0.073	0.119	0.356	
1st floor gym hallway	8:06	0.001	0.007	0.125	0.207	0.416	
1st floor entrance by Room 102	8:11	0.001	0.007	0.119	0.198	0.323	Poly torn down. I have DELTA fix it
Stairwell B-6th floor	8:24	0.002	0.011	0.189	0.302	0.44	Poly not secure. I have DELTA fix it
Stairwell B- 5th floor	8:27	0.002	0.011	0.188	0.292	0.428	No poly present
5th floor elevator lobby	8:32	0.014	0.028	0.21	0.31	0.442	No poly present. No work ongoing. will talk to cleaner. Pile of dust obvious
5th floor hallway at Room 507	8:36	0.011	0.024	0.177	0.263	0.407	See Above
Room 507	8:39	0.002	0.012	0.073	0.097	0.121	
5th floor hallway at Room 517	8:42	0.002	0.007	0.082	0.114	0.152	
Room 518	8:44	0.002	0.006	0.041	0.048	0.056	
Basement Hallway at boiler room by elevator	9:03	0.002	0.019	0.319	0.471	0.612	Dust Present
1st floor elevator lobby	11:27	0.003	0.013	0.119	0.171	0.211	
1st floor gym hallway	11:30	0.003	0.015	0.173	0.27	0.367	
1st floor entrance by Room 102	11:32	0.003	0.013	0.156	0.226	0.297	
Stairwell B-6th floor	11:36	0.001	0.004	0.035	0.053	0.073	
Stairwell B- 5th floor	11:38	0.001	0.003	0.039	0.063	0.089	
5th floor elevator lobby	11:40	0.002	0.008	0.065	0.087	0.11	
5th floor hallway at Room 507	11:42	0.003	0.012	0.088	0.125	0.19	
Room 507	11:43	0.002	0.009	0.05	0.07	0.091	
5th floor hallway at Room 517	11:46	0.003	0.009	0.06	0.079	0.105	
Room 518	11:47	0.003	0.008	0.044	0.06	0.099	
Basement Hallway at boiler room by elevator	11:55	0.0001	0.004	0.049	0.077	0.117	
1st floor elevator	14:03	0.002	0.011	0.148	0.221	0.265	
1st floor gym hallway	14:05	0.001	0.009	0.137	0.2	0.254	
1st floor entrance by Room 102	14:07	0.001	0.008	0.096	0.141	0.176	
Stairwell B-6th floor	14:12	0.0004	0.001	0.016	0.026	0.041	door threshold needs new poly
Stairwell B- 5th floor	14:15	0.001	0.003	0.034	0.059	0.105	
5th floor elevator lobby	14:16	0.001	0.005	0.055	0.078	0.101	
5th floor hallway at Room 507	14:18	0.001	0.008	0.069	0.089	0.100	
Room 507	14:21	0.002	0.01	0.068	0.081	0.094	
5th floor hallway at Room 517	14:22	0.003	0.01	0.073	0.093	0.107	
Room 518	14:24	0.002	0.006	0.027	0.028	0.032	
Basement Hallway at boiler room by elevator	14:36	0.002	0.006	0.052	0.026	0.093	

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

3-Dec Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	9:25	0.001	0.002	0.017	0.027	0.039	
1st floor elevator lobby	8:55	0.003	0.013	0.108	0.14	0.169	
1st floor gym hallway	8:57	0.004	0.021	0.273	0.484	0.923	holes in wall poly cut open to area
1st floor entrance by Room 102	9:01	0.004	0.018	0.231	0.335	0.415	poly ripped
Stairwell B-6th floor	9:06	0.002	0.008	0.100	0.149	0.186	poly should be repaired
Stairwell B- 5th floor	9:08	0.002	0.007	0.087	0.128	0.159	
5th floor elevator lobby	9:09	0.002	0.009	0.105	0.155	0.21	
5th floor hallway at Room 507	9:11	0.002	0.012	0.128	0.171	0.202	
Room 507	9:13	0.001	0.004	0.027	0.036	0.047	
5th floor hallway at Room 517	9:16	0.002	0.005	0.035	0.056	0.078	
Room 518	9:17	0.002	0.003	0.01	0.012	0.014	
Basement Hallway at boiler room by elevator	9:24	0.003	0.036	0.791	1.375	2.063	I have smith construction clean the area
Basement Hallway at boiler room by elevator (retest)	11:25	0.003	0.021	0.086	0.21	0.207	

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

4-Dec Criterion Project Number

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Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	8:56	0.0008	0.002	0.006	0.011	0.029	
1st floor elevator lobby	8:04	0.002	0.009	0.082	0.107	0.136	
1st floor gym hallway	8:08	0.002	0.008	0.065	0.085	0.097	
1st floor entrance by Room 102	8:11	0.003	0.006	0.126	0.138	0.235	
Stairwell B-6th floor	8:18	0.002	0.014	0.092	0.1	0.099	
Stairwell B- 5th floor	8:21	0.003	0.009	0.076	0.092	0.145	
5th floor elevator lobby	8:23	0.002	0.008	0.062	0.079	0.087	
5th floor hallway at Room 507	8:26	0.002	0.006	0.073	0.089	0.097	
Room 507	8:27	0.002	0.011	0.076	0.125	0.136	
5th floor hallway at Room 517	8:33	0.002	0.005	0.071	0.093	0.119	
Room 518	8:35	0.002	0.007	0.052	0.098	0.162	
Basement Hallway at boiler room by elevator	8:48	0.003	0.022	0.126	0.256	0.397	area needs to be cleaned
1st floor elevator lobby	11:32	0.002	0.015	0.118	0.176	0.249	
1st floor gym hallway	11:35	0.004	0.012	0.152	0.216	0.263	
1st floor entrance by Room 102	11:36	0.002	0.009	0.137	0.185	0.217	
Stairwell B-6th floor	11:43	0.002	0.004	0.052	0.061	0.074	
Stairwell B- 5th floor	11:45	0.001	0.002	0.062	0.073	0.092	
5th floor elevator lobby	11:48	0.003	0.006	0.044	0.084	0.098	
5th floor hallway at Room 507	11:49	0.001	0.008	0.058	0.065	0.086	
Room 507	11:52	0.002	0.004	0.045	0.068	0.082	
5th floor hallway at Room 517	11:55	0.003	0.006	0.072	0.083	0.101	
Room 518	11:56	0.002	0.004	0.032	0.058	0.079	
Basement Hallway at boiler room by elevator	12:05	0.0001	0.004	0.059	0.071	0.154	area was cleaned when asked
1st floor elevator	14:05	0.002	0.007	0.118	0.156	0.253	
1st floor gym hallway	13:57	0.002	0.008	0.118	0.198	0.254	
1st floor entrance by Room 102	13:59	0.001	0.005	0.046	0.069	0.089	
Stairwell B-6th floor	14:09	0.002	0.006	0.064	0.092	0.109	
Stairwell B- 5th floor	14:10	0.002	0.007	0.095	0.15	0.205	
5th floor elevator lobby	14:12	0.002	0.007	0.075	0.115	0.149	
5th floor hallway at room 507	14:14	0.001	0.006	0.06	0.081	0.096	
Room 507	14:15	0.001	0.004	0.027	0.036	0.044	
5th floor hallway at Room 517	14:19	0.001	0.005	0.04	0.055	0.067	
Room 518	14:21	0.001	0.005	0.02	0.023	0.023	
Basement Hallway at boiler room by elevator	14:34	0.003	0.006	0.074	0.115	0.157	

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

5-Dec Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	8:04	0.001	0.003	0.026	0.035	0.058	
1st floor elevator lobby	7:49	0.001	0.007	0.087	0.135	0.17	
1st floor gym hallway	7:43	0.002	0.009	0.133	0.218	0.312	poly open. no hepa in work area
1st floor entrance by Room 102	7:46	0.002	0.01	0.161	0.276	0.402	poly ripped. no HEPA in area
Stairwell B-6th floor	8:09	0.001	0.006	0.077	0.108	0.139	
Stairwell B- 5th floor	8:11	0.002	0.005	0.064	0.091	0.115	no poly up anymore. door is shut to stairwell
5th floor elevator lobby	8:14	0.001	0.008	0.084	0.154	0.209	
5th floor hallway at Room 507	8:16	0.002	0.009	0.073	0.092	0.121	
Room 507	8:17	0.001	0.006	0.034	0.045	0.073	
5th floor hallway at Room 517	8:21	0.002	0.006	0.024	0.041	0.069	
Room 518	8:23	0.001	0.003	0.017	0.031	0.049	
Basement Hallway at boiler room by elevator	8:01	0.002	0.022	0.136	0.204	0.285	

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	9:21	0.002	0.004	0.018	0.026	0.037	
1st floor elevator lobby	8:45	0.049	0.133	0.786	1.069	1.274	obvious air flow coming from area next to elevators. poly flap demonstrating air flow. odor existing on 1st floor. dont know source
1st floor gym hallway	8:56	0.043	0.203	2.396	3.77	5.527	odor existing. poly in tact
1st floor entrance by Room 102	8:59	0.015	0.046	0.394	0.594	0.783	air flow coming out of work area
Stairwell B-6th floor	9:03	0.019	0.063	0.55	0.791	1.068	odor existing. pile of debris at bottom of steps
Stairwell B- 5th floor	9:05	0.014	0.054	0.519	0.792	1.242	odor existing. pile of debris by steps
5th floor elevator lobby	9:08	0.014	0.046	0.334	0.443	0.533	dusty baker shelf and equipment in lobby
5th floor hallway at Room 507	9:10	0.01	0.032	0.216	0.275	0.319	dusty work equipment in hall
Room 507	9:12	0.002	0.005	0.031	0.037	0.047	
5th floor hallway at Room 517	9:14	0.006	0.018	0.114	0.145	0.167	
Room 518	9:16	0.003	0.01	0.051	0.059	0.066	odor from dead mouse and droppings. some sort of liquid spill present
Basement Hallway at boiler room by elevator	9:23	0.004	0.015	0.124	0.181	0.232	
1st floor elevator lobby	11:26	0.004	0.023	0.245	0.332	0.416	
1st floor gym hallway	11:28	0.003	0.019	0.152	0.216	0.263	
1st floor entrance by Room 102	11:31	0.007	0.052	0.86	1.222	1.482	
Stairwell B-6th floor	11:13	0.004	0.028	0.354	0.488	0.569	
Stairwell B- 5th floor	11:14	0.004	0.024	0.291	0.415	0.552	
5th floor elevator lobby	11:16	0.004	0.025	0.283	0.369	0.416	
5th floor hallway at Room 507	11:19	0.004	0.023	0.265	0.355	0.396	
Room 507	11:20	0.002	0.009	0.06	0.068	0.074	
5th floor hallway at Room 517	11:22	0.003	0.012	0.09	0.108	0.114	
Room 518	11:24	0.003	0.009	0.063	0.072	0.076	
Basement Hallway at boiler room by elevator	12:05	0.003	0.02	0.136	0.155	0.183	the 5th floor hallway and clean
1st floor elevator	13:41	0.004	0.021	0.187	0.246	0.284	
1st floor gym hallway	13:43	0.004	0.02	0.196	0.275	0.358	
1st floor entrance by Room 102	13:45	0.002	0.01	0.085	0.119	0.163	
Stairwell B-6th floor	13:50	0.004	0.019	0.163	0.229	0.254	
Stairwell B- 5th floor	13:51	0.003	0.016	0.164	0.223	0.292	
5th floor elevator lobby	13:52	0.004	0.018	0.12	0.149	0.171	
5th floor hallway at Room 507	13:54	0.003	0.016	0.125	0.162	0.178	
Room 507	13:57	0.001	0.003	0.036	0.042	0.051	
5th floor hallway at Room 517	14:00	0.007	0.032	0.163	0.186	0.194	
Room 518	14:02	0.002	0.003	0.012	0.021	0.032	
Basement Hallway at boiler room by elevator	14:13	0.002	0.004	0.086	0.097	0.178	