



December 2, 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 November 25, 26 and 27, 2019, Ms. Lauren Mitchell of Criterion Laboratories, Inc. (Criterion) conducted particulate dust monitoring in and around various construction areas at Benjamin Franklin High School. Due to the school being closed for the Thanksgiving holiday no dust monitoring was conducted on November 28 or November 29.

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/m³) for PM 10 (respirable dust) and 15 mg/m³ 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/m³ for Total Dust.

The Environmental Protection Agency (EPA) sets a limit of 35 mg/m³ for PM 2.5 over a 24 hour period and 150 mg/m³ 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.

School District of Philadelphia
Mr. Brian Joseph
December 2, 2019
Page 2

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).

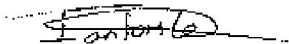
Conclusion

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 November 25 to November 27, 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

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	8:47	0.004	0.007	0.026	0.034	0.049	
1st floor elevator lobby	8:05	0.004	0.017	0.213	0.332	0.498	Workers have ripped poly, I have Delta fix immediately
1st floor gym hallway	8:07	0.003	0.012	0.109	0.158	0.21	
1st floor entrance by Room 102	8:10	0.002	0.008	0.051	0.063	0.088	
Stairwell B-6th floor	8:15	0.004	0.009	0.047	0.072	0.105	
Stairwell B- 5th floor	8:18	0.004	0.009	0.063	0.102	0.18	
5th floor elevator lobby	8:21	0.003	0.014	0.149	0.212	0.276	
5th floor hallway at Room 507	8:23	0.003	0.014	0.154	0.213	0.294	
Room 507	8:26	0.002	0.008	0.054	0.066	0.077	
5th floor hallway at Room 517	8:30	0.002	0.009	0.093	0.129	0.166	
Room 518	8:32	0.002	0.007	0.055	0.073	0.098	
Basement Hallway at boiler room by elevator	8:40	0.003	0.007	0.073	0.124	0.195	
1st floor elevator lobby	11:31	0.002	0.011	0.115	0.18	0.288	
1st floor gym hallway	11:36	0.003	0.015	0.153	0.212	0.288	
1st floor entrance by Room 102	11:39	0.002	0.008	0.046	0.054	0.063	
Stairwell B-6th floor	11:47	0.003	0.011	0.151	0.215	0.323	
Stairwell B- 5th floor	11:50	0.003	0.01	0.126	0.211	0.377	
5th floor elevator lobby	11:53	0.002	0.011	0.113	0.169	0.248	
5th floor hallway at Room 507	11:54	0.002	0.009	0.064	0.088	0.118	
Room 507	11:58	0.002	0.009	0.05	0.056	0.069	
5th floor hallway at Room 517	12:03	0.001	0.003	0.01	0.013	0.018	
Room 518	12:07	0.002	0.005	0.044	0.07	0.12	
Basement Hallway at boiler room by elevator	12:15	0.003	0.012	0.122	0.176	0.215	
1st floor elevator	14:15	0.007	0.022	0.169	0.272	0.339	
1st floor gym hallway	14:18	0.011	0.028	0.076	0.203	0.293	
1st floor entrance by Room 102	14:22	0.011	0.021	0.068	0.08	0.097	
Stairwell B-6th floor	14:30	0.006	0.09	0.214	0.277	0.341	Poly is falling, I have Delta fix this
Stairwell B- 5th floor	14:34	0.007	0.032	0.104	0.261	0.359	
5th floor elevator lobby	14:38	0.006	0.028	0.099	0.267	0.42	I have the cleaner mop the area
5th floor hallway at Room 507	14:43	0.006	0.02	0.153	0.206	0.247	
Room 507	14:47	0.004	0.01	0.041	0.051	0.06	
5th floor hallway at Room 517	14:51	0.002	0.003	0.009	0.011	0.015	
Room 518	14:54	0.001	0.011	0.031	0.05	0.082	
Basement Hallway at boiler room by elevator	15:10	0.004	0.017	0.129	0.192	0.256	

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

26-Nov

Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	9:20	0.004	0.007	0.025	0.036	0.051	
1st floor elevator lobby	8:35	0.005	0.017	0.168	0.26	0.408	Negative air machine is removed from work area, I have Steve replace it and turn it on
1st floor gym hallway	8:39	0.007	0.023	0.156	0.227	0.32	
1st floor entrance by Room 102	8:43	0.006	0.02	0.141	0.221	0.308	
Stairwell B-6th floor	8:50	0.004	0.013	0.097	0.145	0.211	
Stairwell B- 5th floor	8:52	0.004	0.014	0.106	0.159	0.262	
5th floor elevator lobby	8:56	0.012	0.045	0.239	0.321	0.411	No workers in the area, but I have the cleaner mop the area
5th floor hallway at Room 507	8:59	0.016	0.062	0.32	0.418	0.529	No workers in the area, I have the cleaner mop the area
Room 507	9:02	0.005	0.016	0.067	0.084	0.107	
5th floor hallway at Room 517	9:05	0.004	0.01	0.042	0.053	0.067	
Room 518	9:07	0.002	0.003	0.012	0.018	0.03	
Basement Hallway at boiler room by elevator	9:15	0.003	0.008	0.036	0.046	0.056	

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

27-Nov Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	9:47	0.004	0.009	0.054	0.072	0.105	
1st floor elevator lobby	9:00	0.002	0.006	0.063	0.108	0.185	
1st floor gym hallway	9:04	0.004	0.015	0.155	0.235	0.344	
1st floor entrance by Room 102	9:07	0.003	0.011	0.097	0.137	0.181	
Stairwell B-6th floor	9:12	0.003	0.008	0.052	0.068	0.100	
Stairwell B- 5th floor	9:18	0.003	0.007	0.051	0.073	0.103	
5th floor elevator lobby	9:22	0.003	0.01	0.069	0.091	0.117	
5th floor hallway at Room 507	9:24	0.003	0.01	0.074	0.104	0.137	
Room 507	9:27	0.002	0.006	0.047	0.076	0.124	
5th floor hallway at Room 517	9:31	0.002	0.005	0.028	0.044	0.069	
Room 518	9:34	0.002	0.003	0.008	0.009	0.017	
Basement Hallway at boiler room by elevator	9:40	0.003	0.009	0.094	0.161	0.257	
1st floor elevator lobby	11:39	0.002	0.004	0.039	0.066	0.117	
1st floor gym hallway	11:42	0.002	0.003	0.014	0.021	0.032	
1st floor entrance by Room 102	11:45	0.004	0.012	0.088	0.122	0.155	
Stairwell B-6th floor	11:47	0.002	0.013	0.033	0.046	0.062	
Stairwell B- 5th floor	11:54	0.002	0.005	0.044	0.052	0.086	
5th floor elevator lobby	11:58	0.003	0.007	0.043	0.062	0.092	
5th floor hallway at Room 507	12:01	0.002	0.008	0.078	0.103	0.117	
Room 507	12:03	0.003	0.008	0.049	0.065	0.078	
5th floor hallway at Room 517	12:06	0.005	0.008	0.022	0.028	0.036	
Room 518	12:09	0.002	0.004	0.01	0.012	0.014	
Basement Hallway at boiler room by elevator	12:17	0.002	0.009	0.103	0.172	0.253	
1st floor elevator	14:10	0.001	0.003	0.017	0.025	0.033	
1st floor gym hallway	14:13	0.001	0.002	0.006	0.011	0.013	
1st floor entrance by Room 102	14:17	0.002	0.005	0.024	0.033	0.037	
Stairwell B-6th floor	14:24	0.002	0.004	0.026	0.035	0.039	
Stairwell B- 5th floor	14:27	0.002	0.008	0.116	0.181	0.255	
5th floor elevator lobby	14:30	0.001	0.004	0.022	0.027	0.036	
5th floor hallway at Room 507	14:33	0.002	0.005	0.031	0.038	0.048	
Room 507	14:35	0.002	0.005	0.023	0.026	0.031	
5th floor hallway at Room 517	14:39	0.001	0.003	0.011	0.016	0.025	
Room 518	14:41	0.001	0.003	0.008	0.01	0.016	
Basement Hallway at boiler room by elevator	14:50	0.002	0.004	0.022	0.029	0.034	