



January 7, 2020

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 30, 31, 2019 and January 2 and 3, 2020, Ms. Alyssa Cartagena of Criterion Laboratories, Inc. (Criterion) conducted particulate dust monitoring in and around various construction areas at Benjamin Franklin High School. Due to the Holiday there was no sampling conducted on January 1, as no work was being completed at the school on this day.

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
January 7, 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).

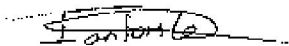
Conclusion

Various readings for PM10 and Total Dust collected throughout the building on some of the days sampled were found to be above the previously established baseline. The technician stopped work when the above items were found and when appropriate, had Smith Construction 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 30, 2019, to January 3, 2020 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

30-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	8:47	0.001	0.002	0.009	0.012	0.018	
1st floor elevator lobby	8:11	0.006	0.035	0.353	0.508	0.63	
1st floor gym hallway	8:13	0.001	0.006	0.119	0.19	0.26	
1st floor entrance by Room 102	8:16	0.001	0.005	0.08	0.121	0.159	
Stairwell B-6th floor	8:23	0.002	0.009	0.053	0.076	0.097	
Stairwell B- 5th floor	8:24	0.002	0.008	0.041	0.065	0.082	
5th floor elevator lobby	8:27	0.002	0.01	0.072	0.103	0.134	
5th floor hallway at Room 507	8:29	0.002	0.007	0.048	0.069	0.088	
Room 507	8:31	0.001	0.004	0.013	0.016	0.016	
5th floor hallway at Room 517	8:34	0.002	0.005	0.027	0.038	0.053	
Room 518	8:35	0.001	0.004	0.007	0.007	0.012	
Basement Hallway at boiler room by elevator	8:44	0.005	0.023	0.126	0.211	0.304	
1st floor elevator lobby	11:19	0.002	0.005	0.029	0.034	0.038	
1st floor gym hallway	11:15	0.002	0.007	0.045	0.062	0.079	
1st floor entrance by Room 102	11:17	0.002	0.009	0.074	0.111	0.134	
Stairwell B-6th floor	11:21	0.002	0.008	0.064	0.092	0.123	
Stairwell B- 5th floor	11:23	0.002	0.008	0.059	0.085	0.107	
5th floor elevator lobby	11:25	0.002	0.005	0.025	0.032	0.043	
5th floor hallway at Room 507	11:27	0.002	0.004	0.018	0.027	0.046	
Room 507	11:28	0.001	0.002	0.006	0.007	0.009	
5th floor hallway at Room 517	11:31	0.002	0.004	0.015	0.021	0.027	
Room 518	11:32	0.001	0.002	0.005	0.006	0.006	
Basement Hallway at boiler room by elevator	11:40	0.002	0.01	0.143	0.228	0.321	
1st floor elevator	14:23	0.003	0.007	0.032	0.058	0.075	
1st floor gym hallway	14:25	0.003	0.009	0.045	0.071	0.121	
1st floor entrance by Room 102	14:26	0.002	0.011	0.051	0.08	0.116	
Stairwell B-6th floor	14:35	0.002	0.008	0.039	0.055	0.084	
Stairwell B- 5th floor	14:36	0.002	0.006	0.024	0.05	0.091	
5th floor elevator lobby	14:38	0.002	0.013	0.062	0.096	0.132	
5th floor hallway at Room 507	14:41	0.002	0.005	0.028	0.041	0.067	
Room 507	14:42	0.001	0.003	0.012	0.014	0.016	
5th floor hallway at Room 517	14:46	0.002	0.004	0.02	0.035	0.051	
Room 518	14:47	0.001	0.002	0.009	0.011	0.011	
Basement Hallway at boiler room by elevator	14:55	0.003	0.013	0.094	0.126	0.209	

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

31-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	8:39	0.002	0.008	0.017	0.024	0.038	
1st floor elevator lobby	8:13	0.001	0.007	0.073	0.106	0.137	
1st floor gym hallway	8:15	0.001	0.008	0.112	0.186	0.273	
1st floor entrance by Room 102	8:16	0.001	0.005	0.066	0.105	0.152	
Stairwell B-6th floor	8:18	0.001	0.005	0.069	0.101	0.128	
Stairwell B- 5th floor	8:20	0.001	0.003	0.057	0.089	0.121	
5th floor elevator lobby	8:21	0.001	0.004	0.054	0.079	0.104	
5th floor hallway at Room 507	8:24	0.002	0.003	0.015	0.019	0.03	cigarette odor in hallway
Room 507	8:25	0.0003	0.001	0.002	0.003	0.004	
5th floor hallway at Room 517	8:28	0.001	0.003	0.045	0.06	0.082	cleaners in hallway
Room 518	8:30	0.0004	0.001	0.009	0.012	0.019	
Basement Hallway at boiler room by elevator	8:42	0.001	0.004	0.04	0.053	0.076	

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

2-Jan Criterion Project Number

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	8:39	0.002	0.008	0.017	0.024	0.038	
1st floor elevator lobby	8:09	0.003	0.015	0.211	0.327	0.412	cleaning and sweeping on going
1st floor gym hallway	8:06	0.002	0.007	0.072	0.112	0.145	painters in the hallway. floors being thoroughly cleaned
1st floor entrance by Room 102	8:08	0.002	0.004	0.025	0.037	0.046	see above
Stairwell B-6th floor	8:18	0.001	0.005	0.069	0.101	0.128	
Stairwell B- 5th floor	8:20	0.001	0.003	0.057	0.089	0.121	
5th floor elevator lobby	8:21	0.001	0.004	0.054	0.079	0.104	
5th floor hallway at Room 507	8:24	0.002	0.003	0.015	0.019	0.030	cigarette odor in hallway
Room 507	8:25	0.0003	0.001	0.002	0.003	0.004	
5th floor hallway at Room 517	8:28	0.001	0.003	0.045	0.06	0.082	cleaners in hallway
Room 518	8:30	0.0004	0.001	0.009	0.012	0.019	
Basement Hallway at boiler room by elevator	8:42	0.001	0.004	0.04	0.053	0.076	

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments
outdoors	8:51	0.003	0.005	0.009	0.01	0.011	
1st floor elevator lobby	8:27	0.002	0.005	0.038	0.054	0.076	
1st floor gym hallway	8:23	0.002	0.005	0.038	0.056	0.074	
1st floor entrance by Room 102	8:25	0.001	0.004	0.02	0.026	0.031	
Stairwell B-6th floor	8:31	0.002	0.006	0.06	0.035	0.014	
Stairwell B- 5th floor	8:32	0.002	0.006	0.069	0.116	0.162	
5th floor elevator lobby	8:34	0.002	0.006	0.063	0.085	0.109	
5th floor hallway at Room 507	8:36	0.001	0.004	0.024	0.035	0.048	
Room 507	8:39	0.001	0.001	0.006	0.006	0.009	
5th floor hallway at Room 517	8:42	0.001	0.002	0.014	0.016	0.023	
Room 518	8:43	0.001	0.001	0.003	0.006	0.006	
Basement Hallway at boiler room by elevator	8:49	0.001	0.005	0.053	0.034	0.134	
1st floor elevator lobby	11:11	0.005	0.01	0.058	0.087	0.124	
1st floor gym hallway	11:07	0.004	0.009	0.048	0.065	0.088	
1st floor entrance by Room 102	11:09	0.004	0.008	0.037	0.05	0.068	
Stairwell B-6th floor	11:15	0.003	0.01	0.08	0.112	0.155	
Stairwell B- 5th floor	11:17	0.003	0.01	0.085	0.128	0.184	
5th floor elevator lobby	11:20	0.003	0.011	0.08	0.1	0.125	
5th floor hallway at Room 507	11:22	0.003	0.007	0.038	0.052	0.064	
Room 507	11:25	0.002	0.003	0.007	0.009	0.012	
5th floor hallway at Room 517	11:28	0.002	0.004	0.021	0.026	0.036	
Room 518	11:30	0.001	0.002	0.005	0.007	0.007	
Basement Hallway at boiler room by elevator	11:43	0.003	0.006	0.038	0.049	0.062	
1st floor elevator	14:18	0.003	0.007	0.032	0.058	0.075	
1st floor gym hallway	14:20	0.003	0.009	0.045	0.071	0.121	
1st floor entrance by Room 102	14:23	0.002	0.011	0.051	0.08	0.116	
Stairwell B-6th floor	14:33	0.002	0.008	0.039	0.055	0.084	
Stairwell B- 5th floor	14:36	0.002	0.006	0.024	0.05	0.091	
5th floor elevator lobby	14:40	0.002	0.013	0.062	0.096	0.132	
5th floor hallway at Room 507	14:42	0.002	0.005	0.028	0.041	0.067	
Room 507	14:44	0.001	0.003	0.012	0.014	0.016	
5th floor hallway at Room 517	14:48	0.002	0.004	0.02	0.035	0.051	
Room 518	14:51	0.001	0.002	0.009	0.011	0.011	
Basement Hallway at boiler room by elevator	14:56	0.003	0.013	0.094	0.126	0.209	