



October 7, 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 September 30, October 1, 2, 3 and 4, 2019, Mr. Sam Oseroff 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^3) for PM 10 (respirable dust) and $15 \text{ mg}/\text{m}^3$ 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 $10 \text{ mg}/\text{m}^3$ for Total Dust.

The Environmental Protection Agency (EPA) sets a limit of $35 \text{ mg}/\text{m}^3$ for PM 2.5 over a 24 hour period and $150 \text{ mg}/\text{m}^3$ 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.

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.

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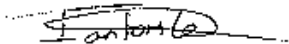
The baseline level to be used for comparison is 0.277mg for PM 10 and 0.413 mg for Total Dust (TD).

Conclusion

The readings for PM10 and total dust collected on September 30, 2019 at 14:54 in the 1st Floor Gym Hallway were found to be above the baseline level that had previously been established. At this time, the technician contacted the cleaning crew to mop and clean the hallway and the contractor repaired all loose critical barriers in the construction areas. All readings collected after this 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-Sep-19	Criterion Project Number			192440					
Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments				
cafeteria	933	0.001	0.004	0.016	0.024	0.030	Barrier loose at edges				
1st floor elevator lobby	938	0.003	0.012	0.067	0.095	0.131					
1st floor gym hallway	942	0.004	0.017	0.091	0.125	0.158	Work in hallway, ceiling open, some barriers loose				
1st floor entrance by 102	949	0.002	0.010	0.044	0.064	0.083					
Stairwell B-6th floor	954	0.000	0.002	0.008	0.015	0.043					
Stairwell B- 5th floor	959	0.000	0.005	0.038	0.054	0.089					
5th floor elevator lobby	1004	0.002	0.010	0.060	0.081	0.113					
5th floor hallway at 507	1010	0.002	0.009	0.047	0.063	0.076					
Room 507	1014	0.001	0.004	0.013	0.015	0.016					
5th floor hallway at 517	1019	0.001	0.005	0.024	0.035	0.041					
cafeteria	1240	0.000	0.001	0.006	0.008	0.009					
1st floor elevator lobby	1243	0.000	0.006	0.039	0.061	0.098					
1st floor gym hallway	1247	0.000	0.006	0.047	0.073	0.117					
1st floor entrance by 102	1253	0.000	0.005	0.038	0.058	0.083					
Stairwell B-6th floor	1300	0.000	0.004	0.029	0.032	0.036					
Stairwell B- 5th floor	1304	0.000	0.002	0.020	0.031	0.050					
5th floor elevator lobby	1307	0.000	0.006	0.042	0.058	0.075					
5th floor hallway at 507	1310	0.001	0.007	0.037	0.050	0.062					
Room 507	1314	0.001	0.006	0.018	0.020	0.020					
5th floor hallway at 517	1318	0.001	0.005	0.028	0.039	0.048					
Room 518	1321	0.000	0.002	0.004	0.004	0.004					
cafeteria	1445	0.000	0.001	0.007	0.011	0.013					
1st floor elevator lobby	1449	0.000	0.010	0.042	0.056	0.072					
1st floor gym hallway	1454	0.001	0.010	0.225	0.348	0.479	corrective action - cleaning in area and reinstallation of barriers in area. no staff or children present in building				
1st floor entrance by 102	1500	0.000	0.013	0.121	0.172	0.211					
Stairwell B-6th floor	1509	0.000	0.003	0.020	0.032	0.054					
Stairwell B- 5th floor	1517	0.000	0.002	0.017	0.025	0.035					
5th floor elevator lobby	1522	0.000	0.007	0.069	0.081	0.093					
5th floor hallway at 507	1530	0.000	0.006	0.039	0.052	0.060					
Room 507	1536	0.000	0.003	0.013	0.014	0.015					
5th floor hallway at 517	1541	0.000	0.004	0.029	0.045	0.059					
Room 518	1547	0.000	0.002	0.005	0.007	0.008					

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

1-Oct-19

Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments				
cafeteria	608	0.000	0.002	0.009	0.012	0.013					
1st floor elevator lobby	611	0.000	0.003	0.008	0.014	0.052					
1st floor gym hallway	620	0.000	0.002	0.010	0.016	0.024					
1st floor entrance by 102	624	0.000	0.001	0.020	0.023	0.029					
Stairwell B-6th floor	630	0.000	0.003	0.022	0.035	0.054					
Stairwell B- 5th floor	634	0.000	0.001	0.015	0.029	0.051					
5th floor elevator lobby	639	0.000	0.002	0.008	0.011	0.016					
5th floor hallway at 507	642	0.000	0.001	0.006	0.007	0.009					
Room 507	646	0.000	0.001	0.003	0.003	0.003					
5th floor hallway at 517	649	0.000	0.001	0.002	0.003	0.004					
Room 518	653	0.000	0.001	0.003	0.004	0.004					

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

2-Oct-19

Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments			
cafeteria	9:09	0.001	0.005	0.024	0.040	0.067	active construction in area			
1st floor elevator lobby	9:14	0.001	0.007	0.056	0.088	0.141	active construction in area			
1st floor gym hallway	9:21	0.001	0.004	0.016	0.021	0.032				
1st floor entrance by 102	9:30	0.001	0.003	0.010	0.017	0.025				
Stairwell B-6th floor	9:42	0.001	0.001	0.106	0.146	0.211				
Stairwell B- 5th floor	9:50	0.001	0.007	0.070	0.109	0.164				
5th floor elevator lobby	9:59	0.001	0.006	0.054	0.078	0.108				
5th floor hallway at 507	10:04	0.001	0.004	0.025	0.034	0.043				
Room 507	10:10	0.000	0.003	0.012	0.016	0.018				
5th floor hallway at 517	10:17	0.001	0.004	0.019	0.026	0.032				
Room 518	10:21	0.000	0.002	0.005	0.006	0.007				
Outdoors	10:30	0.000	0.003	0.011	0.014	0.018				
cafeteria	12:11	0.000	0.002	0.008	0.011	0.015				
1st floor elevator lobby	12:15	0.001	0.006	0.035	0.050	0.065				
1st floor gym hallway	12:18	0.001	0.004	0.018	0.023	0.028				
1st floor entrance by 102	12:22	0.001	0.004	0.016	0.023	0.027				
Stairwell B-6th floor	12:30	0.000	0.006	0.051	0.078	0.107				
Stairwell B- 5th floor	12:33	0.001	0.005	0.030	0.050	0.078				
5th floor elevator lobby	12:36	0.001	0.005	0.029	0.048	0.067				
5th floor hallway at 507	12:40	0.001	0.006	0.047	0.064	0.078				
Room 507	12:44	0.001	0.004	0.023	0.029	0.032				
5th floor hallway at 517	12:48	0.000	0.002	0.012	0.017	0.022				
Room 518	12:51	0.000	0.002	0.006	0.011	0.013				
cafeteria	14:01	0.000	0.005	0.033	0.047	0.054				
1st floor elevator lobby	14:05	0.000	0.008	0.072	0.128	0.189				
1st floor gym hallway	14:09	0.001	0.012	0.108	0.150	0.182				
1st floor entrance by 102	14:12	0.000	0.008	0.067	0.089	0.106				
Stairwell B-6th floor	14:19	0.000	0.002	0.014	0.043	0.094				
Stairwell B- 5th floor	14:24	0.000	0.004	0.050	0.103	0.197				
5th floor elevator lobby	14:30	0.000	0.003	0.017	0.028	0.038				
5th floor hallway at 507	14:35	0.000	0.002	0.016	0.023	0.028				
Room 507	14:39	0.001	0.003	0.012	0.015	0.018				
5th floor hallway at 517	14:46	0.000	0.001	0.011	0.014	0.017				
Room 518	14:52	0.000	0.001	0.006	0.007	0.008				

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

3-Oct-19

Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments				
1st floor elevator lobby	7:41	0.000	0.001	0.006	0.009	0.013					
1st floor gym hallway	7:48	0.000	0.000	0.006	0.008	0.013					
1st floor entrance by 102	7:52	0.000	0.001	0.006	0.009	0.014					
Stairwell B-6th floor	8:00	0.000	0.000	0.004	0.007	0.009					
Stairwell B- 5th floor	8:08	0.000	0.000	0.006	0.008	0.011					
5th floor elevator lobby	8:13	0.000	0.001	0.009	0.011	0.014					
5th floor hallway at 507	8:19	0.000	0.000	0.003	0.006	0.008					
Room 507	8:25	0.000	0.000	0.002	0.005	0.008					
5th floor hallway at 517	8:34	0.000	0.001	0.004	0.006	0.010					
Room 518	8:38	0.000	0.000	0.002	0.003	0.005					
Cafeteria	9:04	0.000	0.001	0.005	0.007	0.007	work complete in area, plastic removed				
Outdoors	9:12	0.000	0.001	0.005	0.006	0.007					

Benjamin Franklin High School (UCLS# 2010)

Date of Sampling

4-Oct-19

Criterion Project Number

192440

Location	Time	PM 1 (mg)	PM 2.5 (mg)	PM 7 (mg)	PM 10 (mg)	Total Dust (mg)	Comments				
outdoors	6:36	0.000	0.001	0.005	0.007	0.010					
1st floor elevator lobby	6:42	0.000	0.001	0.005	0.007	0.010					
1st floor gym hallway	6:46	0.000	0.001	0.004	0.007	0.013					
1st floor entrance by Room 102	6:51	0.000	0.001	0.005	0.006	0.012					
Stairwell B-6th floor	6:55	0.000	0.001	0.007	0.009	0.011					
Stairwell B- 5th floor	6:58	0.000	0.001	0.006	0.009	0.012					
5th floor elevator lobby	7:02	0.000	0.002	0.014	0.023	0.039					
5th floor hallway at Room 507	7:06	0.000	0.002	0.009	0.015	0.025					
Room 507	7:10	0.000	0.001	0.005	0.006	0.007					
5th floor hallway at Room 517	7:17	0.000	0.001	0.011	0.018	0.026					
Room 518	7:20	0.000	0.000	0.001	0.001	0.001					
1st floor elevator lobby	9:01	0.000	0.000	0.003	0.006	0.026					
1st floor gym hallway	9:07	0.000	0.000	0.008	0.011	0.018					
1st floor entrance by Room 102	9:14	0.000	0.000	0.003	0.011	0.022					
Stairwell B-6th floor	9:20	0.000	0.001	0.010	0.016	0.022					
Stairwell B- 5th floor	9:24	0.000	0.000	0.007	0.012	0.016					
5th floor elevator lobby	9:28:00	0.000	0.000	0.006	0.009	0.014					
5th floor hallway at Room 507	9:31	0.000	0.006	0.069	0.110	0.176	adjacent work in hallway				
Room 507	9:39	0.000	0.001	0.004	0.005	0.007					
5th floor hallway at Room 517	9:46	0.000	0.000	0.002	0.002	0.003					
Room 518	9:51	0.000	0.000	0.004	0.005	0.008					