

December 15, 2023

Mr. Nicholas Crupi, CEFM  
Director, Buildings and Grounds  
Scotch Plains - Fanwood Public Schools  
512 Cedar Street  
Scotch Plains, NJ 07076

Dear Mr. Crupi,

This report outlines findings from [ESMCorp's](#) December 8, 2023 Indoor Air Quality monitoring at each of the 8 Scotch Plains-Fanwood Schools. This assessment was conducted as part of the Scotch Plains – Fanwood Schools routine preventative indoor air quality program to ensure acceptable air quality for students, staff and visitors.

The purposes of this inspection were the following:

- Determine if air quality parameters including fresh air supply, volatile organic compounds, carbon monoxide, temperature and humidity were within expected ranges.
- Determine if the school is in general compliance with current guidelines by the State of New Jersey and the CDC with respect to ventilation in classrooms for reducing COVID-19 transmission risk.

The inspections, data analysis and report were conducted Mr. Richard A. Lynch, MBA, CIH, CIEC and Dr. Richard M. Lynch, Ph.D., CIH of Environmental Safety Management Corporation.

## Executive Summary

The December 2023 routine Indoor Air Quality Assessment of the Scotch Plains-Fanwood schools revealed that fresh air supply was within normal ranges in a large majority of the 167 rooms inspected throughout the 8 schools in accordance with PEOSHA, CDC and NJ Department of Education guidelines for COVID-19 transmission risk reduction. There were no musty odors, no widespread visible water damage, and no visible mold contamination observed. There were no elevations in carbon monoxide or volatile organic compounds. Temperature and relative humidity were largely within normal ranges given outdoor conditions at each of the schools. Recommendations for inspecting unit ventilator fan speed and damper position in specific classrooms as well as for encouraging teachers to open windows whenever feasible, are contained at the end of this report.

## **I. Evaluation Criteria**

According to the CDC “regardless of the level of community transmission, it is critical that schools use and layer prevention strategies, following district policies and procedures for COVID-19 transmission risk reduction. Recent [State of NJ Department of Health updated guidance for K-12 Schools \(August 31, 2023\)](#), continue to recommend layered strategies for prevention of COVID-19 transmission in schools. The focus has shifted from an individual case-based response strategy to a transmission mitigation

strategy, where the risk of the whole school community, including the risk of interruptions to learning, is considered.

#### Heating Ventilation, Air Conditioning Systems

The NJDOH and CDC recommended that schools “Improve [ventilation](#) to the extent possible to increase circulation of outdoor air, increase the delivery of clean air, and dilute potential contaminants. This can be achieved through several actions.

- Bring in as much outdoor air as possible.
- Ensure Heating, Ventilation, and Air Conditioning (HVAC) settings are maximizing ventilation.
- Filter and/or clean the air in the school by improving the [level of filtration](#) as much as possible.
- Use exhaust fans in restrooms and kitchens.

For mechanically ventilated schools, The [NJ PEOSHA Indoor Air Quality Standard](#) requires that HVAC systems be inspected and maintained in accordance with manufacturer specifications and that damaged components be repaired. According to the standard, when indoor air levels of carbon dioxide exceed 1,000 parts per million the employer inspect the system to ensure that it is operating as it should NJAC 12:100-13.3. The standard also requires that when indoor air temperatures cannot be maintained between 68-79°F during the heating season, that the HVAC system be inspected. This is based upon the ASHRAE 55 standard which recommends that air temperatures be maintained between 68-72°F during the heating season, 74-78°F during the cooling season and 68-79°F during the transition seasons; all ideally at 30-60% relative humidity.

In non-mechanically ventilated buildings the PEOSHA standard requires that the employer “Assure that buildings without mechanical ventilation are maintained so that windows, doors, vents, stacks, and other portals designed or used for natural ventilation are in operable condition (NJAC 12: 100-13.3-6). In naturally ventilated classrooms (rooms with no mechanical ventilation systems such as unit ventilators, or rooftop air handlers), it is recommended that windows be opened to the maximum extent possible given temperature and security concerns. (Villers et al “[SARS-CoV-2 Aerosol Transmission in Schools: The Effectiveness of Different Interventions](#)”, and Lynch “[Review 2 SARS-CoV2 Aerosol Transmission in Schools: The effectiveness of Different Interventions](#)” Rapid Reviews COVID-19 MIT Press September 19, 2021.

## **II. Methods**

Based upon the above, the following methods were observed:

1. A visual inspection of a representative sample of classrooms within each building was conducted for indications of air quality concerns including water damage, musty odors, air flow and general cleanliness.
2. Carbon Dioxide (CO<sub>2</sub>) was measured as an indicator of fresh air supply in each of the representative areas evaluated at the center of the room, and where accessible, at the discharge of unit ventilators, using a TSI Q-Trak 7575 IAQ Monitor.
3. Volatile Organic Compounds (VOC's), Carbon monoxide, temperature and relative Humidity were also measured.

## **III. Findings and Results**

#### General Observations

- Approximately 167 classrooms throughout the district were inspected and monitored during

normal occupancy by students and staff.

- Classrooms were occupied by an average of 5 to 18 students at the time of assessment.
- Unit ventilators in over 99% of classrooms throughout the district were operating at the time of inspection.
- Windows were closed in most classrooms in each building. On average zero (0) of 2-6 windows were open in each classroom at the time of inspection.
- There were no indications of unusual accumulations of dust or debris in any areas.
- There were no mold-like or musty odors present, and no evidence of unusual mold growth in the areas inspected.

#### Air Monitoring Findings

- Outdoor air was measured to contain approximately 413 to 469 parts per million carbon dioxide with temperature at 46 to 53°F. Relative humidity ranged between 35 to 45% over the inspection period.
- The average carbon dioxide level in all classrooms monitored was 852 parts per million; lower than to the PEOSHA guideline of 1000 ppm and the ASHRAE guideline of 700 ppm above outdoor levels.
- There were no elevations in carbon monoxide detected in any of the classrooms monitored.
- Temperature and relative humidity were within the PEOSH recommended range in most areas tested, averaging 72@ 35% RH, and considered normal.
- Fourteen percent (14%) of classrooms contained elevated carbon dioxide levels exceeding 1,000 parts per million, suggesting a need to open windows whenever feasible, and to inspect unit ventilator fan speed and/or outdoor air damper position as described in the PEOSHA indoor air quality standard.

A summary of inspection findings and air quality results is displayed in Table #1 below.

**Table #1 – Q2 Air Quality Summary December 2023 - Scotch Plains Fanwood Schools**

	Total Rooms inspected	Average CO2 levels (center of room)	Average Temperature (°F)	Average Relative Humidity (%)	Average number of windows open	Average number of windows present	Average number of students present
<b>Scotch Plains - Fanwood High School</b>	43	806	72	33	0	3	15
<b>Evergreen Elementary</b>	16	836	72	37	0	4	15
<b>Coles Elementary</b>	15	754	71	36	0	5	5
<b>Terrill Middle School</b>	22	916	73	33	1	6	18
<b>McGinn Elementary</b>	14	830	73	34	0	4	9
<b>Malcolm E. Nettingham Middle School</b>	27	876	71	34	0	4	15
<b>School One Elementary</b>	16	870	71	35	0	2	11
<b>Brunner Elementary</b>	14	969	72	37	0	5	12
Total	167	-	-	-	-	-	-
Average	21	852	72	35	0	4	13

Detailed classroom findings and recommendations are contained on Table #2 at the end of this report.

#### IV. Conclusions and Recommendations

The December 2023 routine Indoor Air Quality Assessment of the Scotch Plains – Fanwood schools revealed that fresh air supply was within normal ranges in a large majority of the 167 rooms inspected throughout the 8 schools in accordance with PEOSHA, CDC and NJ Department of Education guidelines for COVID-19 transmission risk reduction. There were no musty odors, no widespread visible water damage, and no visible mold contamination observed. There were no elevations in carbon monoxide or volatile organic compounds. Temperature and relative humidity were largely within normal ranges given outdoor conditions at each of the schools.

##### Recommendations

1. Unit ventilators and rooftop HVAC systems in particular classrooms as shown in school-specific Tables at the end of this report should be inspected for airflow rates and/or fresh air damper position.
2. Teachers should be encouraged to open as many windows as is feasible given outdoor temperature and humidity conditions, keep unit ventilators running, and operate supplemental air filters in classrooms, nurse offices and trailers where provided by the district.

Thank you for the opportunity to assist you with the evaluation. Our next routine air quality monitoring will be scheduled for February 2023. Please contact me with any questions at (856)764-3557.

Sincerely,

*Richard A. Lynch*

Richard A. Lynch, MBA, CIH, CIEC

Certified Industrial Hygienist

NJ Licensed Indoor Environmental Consultant

[www.esmcorp.com](http://www.esmcorp.com)

Reviewed and Authorized:

*Richard M. Lynch*

Richard M. Lynch, Ph.D., CIH, CMC, CMRS, CHFM

NJ Licensed Indoor Environmental Consultant

President, ESMCorp

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School Name **Scotch Plains - Fanwood High School**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



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Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	418	0.7	46	45	0	-	
150	no	no	no	yes	0	24	2	8	514	0	71	30	0	500	
175	no	no	no	587	1	24	3	4	543	0.4	73	26	0	500	
156	no	no	no	yes	0	25	0	8	590	0	74	30	0	518	
Teachers Lounge	no	no	no	yes	0	16	0	0	603	0.1	71	30	0	roof	
207	no	no	no	yes	1	22	0	0	633	0.1	71	30	0	roof	
media center	no	no	no	yes	15	100	0	0	656	0	68	37	0	roof	
267	no	no	no	yea	22	25	1	8	675	0.7	74	29	0	575	
222	no	no	no	yes	1	5	0	2	676	0.2	71	30	0	roof	
129	no	no	no	yes	1	24	0	0	696	0	70	32	0	roof	
202	no	no	no	yes	20	24	0	2	698	0.4	71	31	0	roof	
254	no	no	no	yes	0	24	0	8	702	0.2	74	26	0	612	
274	no	no	no	yes	20	24	2	8	707	0.2	73	30	0	609	
271	no	no	no	yes	1	25	0	11	712	0.4	74	30	0	650	
204	no	no	no	yes	22	22	0	0	746	0.1	72	32	0	roof	
231	no	no	no	yes	16	25	0	2	768	0	71	32	0	roof	
278	no	no	no	yes	20	24	0	4	774	3	78	35	0	715	
131	no	no	no	yes	24	24	0	0	777	0.1	71	34	0	roof	
215	no	no	no	yes	20	24	0	2	783	0.1	70	32	0	roof	
102	no	no	no	yes	2	14	0	0	785	0	69	43	0	roof	
128	no	no	no	yes	24	24	0	0	786	0	71	33	0	roof	
172	no	no	no	yes	0	23	0	8	802	0	73	34	0	654	
260	no	no	no	yes	0	24	0	9	802	0	74	31	0	698	check thermostat valve
111	no	no	no	yes	25	30	0	0	811	0	68	36	0	roof	
276	no	no	no	yes	20	24	0	12	817	1.8	75	30	0	732	
211	no	no	no	yes	21	22	0	0	824	0.1	70	33	0	roof	
223	no	no	no	yes	16	25	0	0	824	0	71	32	0	roof	

School Name **Scotch Plains - Fanwood High School**  
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Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	418	0.7	46	45	0	-	
238	no	no	no	yes	20	24	0	0	828	0.2	70	34	0	roof	
237	no	no	no	yes	20	24	0	0	831	0.1	71	33	0	roof	
139	no	no	no	yes	20	24	0	2	832	0.4	70	36	0	roof	
275	no	no	no	yes	20	24	0	12	845	2.1	75	35	0	619	
247	no	no	no	yes	24	24	0	0	853	0	71	34	0	roof	
212	no	no	no	yes	20	20	0	2	873	0	70	33	0	roof	
136	no	no	no	yes	24	24	0	0	880	0.1	71	34	0	roof	
164	no	no	no	yes	10	21	0	11	899	0	74	33	0	580	
137	no	no	no	yes	20	20	0	2	914	0	69	37	0	roof	
242	no	no	no	yes	24	24	0	0	939	0	70	36	0	roof	
282	no	no	no	yes	15	25	0	8	968	0	72	39	0	770	
235	no	no	yes	yes	25	25	0	0	980	0	71	35	0	roof	
233	no	no	no	yes	25	25	0	0	987	0	71	34	0	roof	
265	no	no	no	yes	25	25	1	8	990	0	74	34	0	774	
141	no	no	no	yes	24	24	0	1	1040	0.1	70	36	0	roof	
245	no	no	no	yes	25	25	0	0	1050	0	71	37	0	roof	
281	no	no	no	yes	15	25	0	8	1255	0	80	40	0	875	Inspect HVAC for proper fan speed and damper position and proper heater valve
Average					15	25	0	3	806	0	72	33	0	649	

School Name **Evergreen Elementary**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



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Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	413	0	51	40	0	-	
141	no	no	no	yes	0	12	0	6	548	0	68	43	0	560	
143	no	no	no	yes	0	4	0	4	615	0	71	43	0	roof	
media center	no	no	no	yes	22	50	0	8	684	0	72	33	0	580	
118	no	no	no	yea	17	22	0	2	688	0	70	37	0	589	
131	no	no	no	yea	20	26	0	4	733	0	75	33	0	586	
134	no	no	no	yes	20	24	0	4	744	0	75	33	0	735	
114	no	no	no	yes	1	24	0	2	820	0	70	33	0	roof	
128	no	no	no	yes	21	24	0	6	825	0	73	39	0	593	
132	no	no	no	yes	21	24	0	6	845	0	75	35	0	678	
104	no	no	no	yes	21	24	0	4	850	0	76	35	0	653	
112	no	no	no	yes	1	24	0	2	860	0	71	33	0	roof	
120	no	no	no	yes	17	25	0	5	875	0	72	36	0	785	
127	no	no	no	yes	19	26	0	4	925	0	71	41	0	743	
117	no	no	no	yes	21	25	0	2	944	0	73	38	0	roof	
106	no	no	no	yes	20	25	0	4	1158	0	74	32	0	917	Inspect HVAC for proper fan speed and damper position
123	no	no	no	yes	18	25	0	6	1257	0	71	44	0	1297	Inspect HVAC for proper fan speed and damper position
Average					15	24	0	4	836	0	72	37	0	726	

School Name **Coles Elementary**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



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Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	423	0	52	42	0	-	
107	no	no	no	yes	0	24	0	3	512	0	70	33	0	434	
118	no	no	no	yes	6	24	2	4	589	0	72	32	0	515	
133	no	no	no	yes	0	12	0	2	612	0	71	32	0	roof	
129	no	no	no	yes	0	21	0	4	620	0	71	32	0	roof	
115	no	no	no	yes	1	24	0	4	640	0	72	33	0	593	
144	no	no	no	yes	1	21	0	4	694	0	72	32	0	553	
113	no	no	no	yes	1	25	0	8	711	0	71	36	0	626	
148	no	no	no	yes	21	25	0	4	743	0	70	38	0	616	
119	no	no	no	yes	1	24	0	8	753	0	71	35	0	645	
136	no	no	no	yes	1	24	0	8	760	0	70	42	0	606	
142	no	no	no	yes	1	21	0	8	832	0	72	38	0	706	
134	no	no	no	yes	0	24	0	4	843	0	68	45	0	684	
111	no	no	no	yes	18	25	0	4	856	0	71	40	0	757	
145	no	no	no	no	1	20	0	4	964	0	72	37	0	-	Reactivate Unit Ventilator
112	no	no	no	yes	23	25	0	4	1179	0	70	40	0	1103	Inspect HVAC for proper fan speed and damper position
Average					5	23	0	5	754	0	71	36	0	653	



School Name **Terrill Middle School**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



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Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	450	0	53	36	0		
25	no	no	no	yes	6	25	2	7	605	0	69	30	0	506	
Media Center	no	no	no	yes	10	50	0	17	646	0	74	30	0	roof	
15	no	no	no	yes	1	24	0	8	663	0	75	28	0	525	
11	no	no	no	yes	10	12	0	7	705	0	74	29	0	574	
2	no	no	no	yes	16	24	1	7	747	0	74	33	0	632	
TER	no	no	no	yes	27	30	0	0	753	0	69	33	0	ceiling	
1	no	no	no	yes	16	24	1	7	780	0	74	30	0	615	
29	no	no	no	yes	3	26	1	8	795	0	76	29	0	690	
MCA	no	no	no	yes	24	24	0	0	842	0	73	33	0	roof	
21	no	no	no	yes	24	24	1	4	860	0	72	32	0	776	
8	no	no	no	yes	24	24	0	12	864	0	75	33	0	730	
35	no	no	no	yes	25	26	2	4	925	0	76	30	0	650	
18	no	no	no	yes	20	24	2	4	934	0	73	31	0	732	paint rusted unit ventilator diffuser
9	no	no	no	yes	8	25	0	5	939	0	70	35	0	641	
23	no	no	no	yes	24	24	2	4	945	0	75	32	0	868	
26	no	no	no	yes	23	25	0	7	975	0	73	31	0	855	
7	no	no	no	yes	22	24	1	10	1070	0	71	41	0	787	
32	no	no	no	yes	18	26	2	7	1081	0	74	33	0	850	
14	no	no	no	yes	22	24	2	7	1093	0	74	35	0	855	Inspect HVAC for proper fan speed and damper position
36	no	no	no	yes	20	25	2	4	1216	0	71	38	0	1150	Inspect HVAC for proper fan speed and damper position
40	no	no	no	yes	24	27	0	4	1217	0	71	34	0	853	Inspect HVAC for proper fan speed and damper position
10	no	no	no	yes	20	26	0	8	1500	0	72	39	0	1250	Inspect HVAC for proper fan speed and damper position
Average					18	26	1	6	916	0	73	33	0	765	-

School Name **McGinn Elementary**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



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Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	425	0	52	36	0	-	
116	no	no	no	yes	0	25	0	4	571	0	72	33	0	507	
118	no	no	no	yes	16	24	1	4	690	0	74	35	0	621	
108	no	no	no	yes	1	25	0	4	707	0	70	33	0	roof	
134	no	no	no	yes	0	24	0	4	785	0	75	30	0	644	
104	no	no	no	yes	0	26	0	3	791	0	70	40	0	668	
150	no	no	no	yes	0	25	0	2	824	0	71	32	0	roof	
122	no	no	no	yes	16	25	1	4	835	0	78	33	0	758	
106	no	no	no	yes	7	15	0	3	843	0	71	36	0	roof	
119	no	no	no	yes	16	25	0	3	854	0	75	34	0	633	
129	no	no	no	yes	15	24	0	4	855	0	72	34	0	664	
151	no	no	no	yes	0	25	0	4	939	0	72	35	0	roof	
123	no	no	no	yes	18	25	0	4	951	0	75	32	0	766	
133	no	no	no	yes	21	24	0	4	983	0	75	38	0	733	
130	no	no	no	yes	21	25	0	2	985	0	73	37	0	742	
Average					9	24	0	4	830	0	73	34	0	674	

School Name **Malcolm E. Nettingham Middle School**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



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Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	469	1	48	38	0	-	
114	no	no	no	yes	3	24	3	4	557	0	68	30	0	490	
203	no	no	no	yes	23	26	2	5	650	0	72	30	0	498	
220	no	no	no	yes	1	24	0	8	717	0	72	31	0	588	
110	no	no	no	yes	1	28	0	4	748	0	69	35	0	583	
206	no	no	no	yes	22	22	0	4	750	0	74	30	0	548	
119d	no	no	no	yes	10	25	0	0	765	0	68	37	0	roof	
120	no	no	no	yes	1	12	0	1	781	0	70	34	0	roof	
119b	no	no	no	yes	25	25	0	0	785	0	68	40	0	roof	
303	no	no	no	1	1	24	0	5	796	0	75	31	0	594	
119f	no	no	no	yes	19	25	0	1	808	0	69	35	0	roof	
217	no	no	no	yes	0	25	0	5	835	0	71	32	0	635	
305	no	no	no	yes	24	24	0	4	842	0	71	32	0	635	
208	no	no	no	yes	24	24	0	4	857	0	71	33	0	734	
media center	no	no	no	yes	5	50	0	0	860	0	68	36	0	roof	
301	no	no	no	yes	20	25	1	6	909	0	74	30	0	695	
211	no	no	no	yes	24	24	0	6	939	0	72	33	0	650	
101	no	no	no	yes	0	50	0	0	942	0.1	71	29	0	roof	
104	no	no	no	yes	20	24	0	4	945	0	72	35	0	820	
108	no	no	no	yes	20	20	0	2	961	0	70	36	0	810	
116	no	no	no	yes	22	26	0	5	970	0	73	35	0	687	
316	no	no	no	yes	16	24	0	6	978	0	71	33	0	657	
319	no	no	no	yes	20	24	0	6	995	0	71	33	0	645	
201	no	no	no	yes	24	24	0	8	998	0	71	35	0	831	
117	no	no	no	yes	20	24	0	4	1025	0	71	35	0	700	Inspect HVAC for proper fan speed and damper position
103	no	no	no	yes	20	24	1	4	1035	0	74	35	0	718	Inspect HVAC for proper fan speed and damper position
313	no	no	no	yes	22	20	1	4	1070	0	72	36	0	725	Inspect HVAC for proper fan speed and damper position
309	no	no	no	yes	24	24	1	4	1125	0	71	35	0	775	Inspect HVAC for proper fan speed and damper position

School Name **Malcolm E. Nettingham Middle School**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



21 SCOTT STREET  
 RIVINGTON, NJ 08075  
 TEL: (202) 754-0557  
 FAX: (202) 754-0558  
 WWW.ESM-CORP.COM

Inspected Reviewed and Finalized **Mr. Richard A. Lynch, MBA, CIH, CIEC**  
 by: **Dr. Richard M. Lynch, Ph.D., CIH, CMC, CMRS, CHFM - President**

General Observations									Average Room Measurements				Supply Measurements		
Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	469	1	48	38	0	-	
				Average	15	26	0	4	876	0	71	34	0	668	

School Name **School One Elementary**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



321 SOUTH STREET  
 PLUMBED, NJ 08075  
 TEL: (609) 784-0557  
 FAX: (609) 784-0558  
 WWW.EMCORP.COM

Inspected Reviewed and Finalized **Mr. Richard A. Lynch, MBA, CIH, CIEC**  
 by: **Dr. Richard M. Lynch, Ph.D., CIH, CMC, CMRS, CHFM - President**

Location	General Observations								Average Room Measurements				Supply Measurements		
	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	432	0	52	38	0	-	
130T	no	no	no	yes	0	24	0	4	478	0	70	31	0	424	
208	no	no	no	yes	0	24	0	3	612	0	71	30	0	roof	
203	no	no	no	yew	22	24	0	2	653	0	70	31	0	roof	
102	no	no	no	yes	5	13	0	2	674	0	71	34	0	roof	
209	no	no	no	yes	17	25	0	2	712	0	72	32	0	roof	
112	no	no	no	yes	21	26	0	3	723	0	72	34	0	roof	
211	no	no	no	yes	17	21	0	2	726	0	72	34	0	roof	
108	no	no	no	yes	0	24	0	3	750	0	70	36	0	roof	
110	no	no	no	yes	0	23	0	2	750	0	71	36	0	roof	
201	no	no	no	yes	21	24	1	2	757	0	71	32	0	roof	
105	no	no	no	yes	14	24	0	2	824	0	71	35	0	roof	
104	no	no	no	yes	16	24	0	2	842	0	71	35	0	roof	
101	no	no	no	yes	1	24	0	2	856	0	70	37	0	roof	
204	no	no	no	yes	0	24	0	2	1125	0	72	36	0	roof	Inspect HVAC for proper fan speed and damper position
206	no	no	no	yes	20	24	0	2	1643	0	72	40	0	roof	Inspect HVAC for proper fan speed and damper position
205	no	no	no	yes	22	24	0	2	1789	0	72	41	0	roof	Inspect HVAC for proper fan speed and damper position
Average					11	23	0	2	870	0	71	35	0	-	

School Name **Brunner Elementary**  
 Inspection Type **Mold/Air Quality Inspection**  
 Date of inspection **12/8/2023**



21 SCOTT STREET  
 RIVERVIEW, NJ 08075  
 TEL: (201) 794-3557  
 FAX: (201) 794-3558  
 WWW.ESM-CORP.COM

Inspected Reviewed and Finalized **Mr. Richard A. Lynch, MBA, CIH, CIEC**  
 by: **Dr. Richard M. Lynch, Ph.D., CIH, CMC, CMRS, CHFM - President**

General Observations									Average Room Measurements				Supply Measurements		
Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	Actual students	Potential Students	Windows Open?	total windows present	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-	-	-	-	-	434	0	53	35	0		
105	no	no	no	yes	1	24	1	3	621	0	71	35	0	565	
111	no	no	no	yes	1	24	0	4	732	0	69	41	0	578	
128	no	no	no	yes	4	16	0	3	753	0	70	33	0	roof	
media center	no	no	no	yws	20	50	0	4	756	0	71	32	0	roof	
125	no	no	no	yes	7	12	0	2	786	0	70	33	0	roof	
121	no	no	no	yes	0	22	1	7	915	0	70	35	0	872	
206	no	no	no	yes	1	24	0	4	953	0	71	39	0	864	
116	no	no	no	yes	20	24	0	4	961	0	70	40	0	843	
119	no	no	no	yes	18	24	0	4	969	0	70	37	0	834	
203	no	no	no	yes	19	24	1	4	1079	0	77	38	0	908	Inspect HVAC for proper fan speed and damper position
208	no	no	no	yes	20	25	0	8	1080	0	74	36	0	735	Inspect HVAC for proper fan speed and damper position
210	no	no	no	yws	18	22	2	8	1138	0	78	32	0	823	Inspect HVAC for proper fan speed and damper position
207	no	no	no	yes	19	25	0	8	1222	0	73	38	0	953	Inspect HVAC for proper fan speed and damper position
113	no	no	no	yes	20	25	0	4	1604	0	71	42	0	1489	Inspect HVAC for proper fan speed and damper position
Average					12	24	0	5	969	0	72	37	0	860	