

June 8, 2026

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 [ESM Corp's](#) June 1-2, 2026 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 the PEOSHA Indoor Air Quality Standard and current guidelines by the State of New Jersey and the CDC with respect to ventilation in classrooms.

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

Executive Summary

The March 2026 3rd Quarter routine Indoor Air Quality Assessment of the Scotch Plains – Fanwood schools revealed that fresh air supply rates were within normal expected ranges in a most of the 138 rooms inspected throughout the 8 schools in accordance with PEOSHA, and CDC guidelines. 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 within normal ranges given outdoor conditions at each of the schools.

I. Evaluation Criteria

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 recommends where controllable 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.

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 (CO₂) 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. Carbon monoxide, temperature and relative Humidity were also measured.
3. Volatile Organic Compounds (VOC's) were measured using a Toxi Rae Photoionizer calibrated to isobutylene.

III. Findings and Results

General Observations

- Approximately 138 classrooms throughout the district were inspected and monitored during normal occupancy by students and staff.
- Classrooms were occupied by an average of 9 to 17 students at the time of assessment.
- Unit ventilators in over 88% of classrooms throughout the district were operating at the time of inspection.
- Most classroom windows were closed 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 411 to 470 parts per million carbon dioxide with temperature averaging 70 to 82°F @ 30-45% relative humidity.
- The average carbon dioxide level in all classrooms monitored was 982 parts per million; approximately equivalent to the PEOSHA guideline of 1000 ppm and the ASHRAE guideline of 700 ppm above outdoor levels. Based upon the above, fresh air introduction rates as indicated by carbon dioxide levels were within PEOSHA/ASHRAE guidelines in a large majority of classrooms inspected, indicating that rooftop air handlers and unit ventilators were operating per design.
- There were no elevations in carbon monoxide or volatile organic compounds detected in any of the classrooms monitored.
- Temperature and relative humidity were within the PEOSH recommended range in most areas tested, averaging 72°F @ 47% RH, and considered normal given outdoor conditions.

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

Table #1 – Air Quality Summary June 1-2, 2026 - 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 occupants present	# of rooms with deactivated HVAC
Scotch Plains - Fanwood High School	33	990	71	41	0	9	7
Evergreen Elementary	16	1067	72	47	1	17	2
Coles Elementary	11	1010	72	49	0	14	0
Terrill Middle School	18	1018	73	49	0	17	1
McGinn Elementary	15	813	72	50	0	16	1
Malcolm E. Nettingham Middle School	20	871	73	43	0	11	3
School One Elementary	12	888	72	47	0	17	0
Brunner Elementary	13	1233	71	48	0	17	2
Total	138	-	-	-	-	-	16
Average	17	982	72	47	0	15	12%

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

IV. Conclusions and Recommendations

The June 2026 3rd Quarter routine Indoor Air Quality Assessment of the Scotch Plains – Fanwood schools revealed that fresh air supply rates were within normal expected ranges in a most of the 138 rooms inspected throughout the 8 schools in accordance with PEOSHA, CDC and NJ Department of Education guidelines. 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 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, and keep unit ventilators running.

Thank you for the opportunity to assist you with the evaluation. Please contact me with any questions at (856)764-3557.

Sincerely,

Richard M. Lynch

Richard M. Lynch, Ph.D., CIH, CMC, CMRS, CHFM
President - Environmental Safety Management Corporation -
AIHA Fellow

Certified Industrial Hygienist
Certified Microbial Consultant
Certified Microbial Remediation Supervisor
Certified Healthcare Facility Manager

www.esmcorp.com

School Name **Scotch Plains - Fanwood High School**

Inspection Type **Mold/Air Quality Inspection**

Date of inspection **6/1/2026**

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



Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-			470	0.7	70	41	0	-	
111	no	no	no	roof	25	0	902	0	70	48	0	roof	
120	no	no	no	roof	25	0	894	0	71	48	0	roof	
128	no	no	no	roof	20	0	933	0	69	48	0	roof	
133	no	no	no	roof	10	0	897	0	70	49	0	roof	
137	no	no	no	roof	18	0	970	0	70	49	0	roof	
139	no	no	no	roof	20	1	1032	0	70	50	0	roof	
140	no	no	no	roof	20	0	1002	0	70	49	0	roof	
142	no	no	no	roof	10	0	947	0	69	49	0	roof	
154	no	no	no	no	0	0	1361	0	75	47	0	off	reactivate unit ventilator
157	no	no	no	no	0	0	939	0	73	44	0	off	
156	no	no	no	no	2	0	1075	0	72	43	0	off	reactivate unit ventilator
164	no	no	no	yes	7	0	687	0	72	44	0	507	
171	no	no	no	yes	0	0	601	0	71	50	0	521	
175	no	no	no	yes	0	0	650	0	72	44	0	580	
176	no	no	no	yes	20	0	968	0	73	49	0	986	
203	no	no	no	roof	7	0	859	0	71	46	0	roof	
210	no	no	no	roof	20	0	1025	0	71	47	0	roof	
212	no	no	no	roof	20	0	945	0	70	47	0	roof	
223	no	no	no	roof	2	0	906	0	69	46	0	roof	
225	no	no	no	roof	2	0	894	0	69	47	0	roof	
233	no	no	no	roof	0	0	984	0	71	48	0	roof	
242	no	no	no	roof	5	0	936	0	71	50	0	roof	
237	no	no	no	roof	22	0	1037	0	71	0	0	roof	
246	no	no	no	roof	22	0	1100	0	70	0	0	roof	
247	no	no	no	roof	0	0	990	0	70	0	0	roof	

School Name **Scotch Plains - Fanwood High School**

Inspection Type **Mold/Air Quality Inspection**

Date of inspection **6/1/2026**

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



Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
252	no	no	no	no	0	0	1025	0	74	0	0	875	
256	no	no	no	yes	1	0	750	0	72	43	0	607	
261	no	no	no	yes	2	0	1035	0	72	41	0	992	check fresh air damper
267	no	no	no	no	2	0	1350	0	71	44	0	off	reactivate unit ventilator
271	no	no	no	no	1	1	1444	0	74	47	0	off	reactivate unit ventilator
276	no	no	no	20	1	3	809	0	75	39	0	586	
279	no	no	no	no	0	0	1094	0	75	45	0	871	
282	no	no	no	yes	0	0	1642	0	74	47	0	1255	unit ventilator operating properly. Open windows when crowded
				Average	9	0	990	0	71	41	0	778	

School Name **Evergreen Elementary**
Inspection Type **Mold/Air Quality Inspection**
Date of inspection **6/2/2026**



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

Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-			450	0	77	38	0	-	
104	no	no	no	yes	13	0	769	0	71	45	0	568	
106	no	no	no	yes	25	0	1321	0	71	50	0	984	open windows when crowded
112	no	no	no	yes	17	0	808	0	72	47	0	roof	
117	no	no	no	yes	17	0	901	0	71	50	0	roof	
118	no	no	no	no	12	0	623	0	71	45	0	off	reactivate unit ventilator
119	no	no	no	yes	20	0	899	0	72	45	0	530	
123	no	no	no	yes	25	0	1360	0	73	50	0	1154	unit ventilator running however low flow....check damper and coil blockage?
127	no	no	no	yes	0	0	806	0	70	48	0	687	
128	no	no	no	yes	18	20	950	0	75	49	0	619	
122 media center	no	no	no	yes	1	0	758	0	72	43	0	roof	
131	no	no	no	yes	25	0	935	0	73	44	0	628	
134	no	no	no	yes	25	0	1945	0	72	52	0	1868	check fresh air damper position
135	no	no	no	no	25	0	1944	0	71	48	0	off	reactivate unit ventilator, open windows when crowded
139	no	no	no	yes	15	0	691	0.2	70	45	0	584	
149	no	no	no	roof	9	0	1060	0.8	72	46	0	roof	
151	no	no	no	roof	20	0	1300	0.8	75	43	0	roof	
Average					17	1	1067	0	72	47	0	847	

School Name **Coles Elementary**
 Inspection Type **Mold/Air Quality Inspection**
 Date of inspection **6/1/2026**



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

Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-								-	
107	no	no	no	yes	0	0	626	0	71	51	0	576	
110	no	no	no	yes	25	0	1125	0.7	74	50	0	980	check fresh air damper position
113	no	no	no	yes	20	0	1300	0	73	50	0	1970	check fresh air damper position and fan speed
114	no	no	no	yes	16	0	1316	0	73	49	0	1060	check fresh air damper position
120	no	no	no	yes	20	0	1350	0	73	52	0	1070	check fresh air damper position and fan speed
121	no	no	no	yes	24	0	850	0	72	40	0	625	
128	no	no	no	roof	2	0	602	0	69	44	0	roof	
131	no	no	no	roof	6	1	652	0	69	46	0	roof	
134	no	no	no	yes	18	0	1300	0	71	56	0	1100	check fresh air damper position
137	no	no	no	yes	16	0	960	0	73	50	0	837	
143	no	no	no	yes	20	0	1200	0	73	51	0	1200	check fresh air damper position
148	no	no	no	yes	1	0	843	0	72	49	0	791	
				Average	14	0	1010	0	72	49	0	1021	

School Name **Terrill Middle School**
Inspection Type **Mold/Air Quality Inspection**
Date of inspection **6/1/2026**



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

Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-			418	0	75	36	0	-	
3	no	no	no	yes	3	0	939	0	76	47	0	766	
2	no	no	no	yes	16	0	1350	0	75	58	0	1100	open windows when crowded
6	no	no	no	yes	0	0	732	0	75	52	0	566	
media center	no	no	no	roof	10	0	499	0	73	42	0	roof	
8	no	no	no	yes	16	1	672	0	74	42	0	580	
11	no	no	no	yes	2	0	546	0	75	49	0	469	
12	no	no	no	yes	24	0	1075	0	75	47	0	783	
15	no	no	no	yes	6	0	1115	0	75	50	0	975	lower thermostat set temp to increase outdoor air. Done during inspection
16	no	no	no	yes	20	4	781	0	76	40	0	520	
18	no	no	no	yes	24	0	1040	0	70	51	0	814	
21	no	no	no	yes	24	0	1140	0	73	50	0	1195	check fresh air damper position
23	no	no	no	yes	24	0	1428	0	70	53	0		check thermostat and fresh air damper position
25	no	no	no	yes	20	0	991	0	72	49	0	825	
28	no	no	no	yes	25	0	1193	0	70	46	0	772	
31	no	no	no	yes	24	0	1806	0	70	45	0	1850	check fresh air damper position and fan speed
35	no	no	no	yes	25	0	1100	0	69	53	0		cycled off on freeze stat
38	no	no	no	no	24	1	890	0	72	55	0	682	reactivate unit ventilator
40	no	no	no	yes	20	0	1033	0	71	50	0	cycled on on freeze stat	cycled off on freeze stat
Average					17	0	1018	0	73	49	0	850	-

School Name **McGinn Elementary**
 Inspection Type **Mold/Air Quality Inspection**
 Date of inspection **6/2/2026**



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

Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°f	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-			423	0	73	45		-	
103	no	no	no	yes	20	0	830	0	72	48	0	750	
105	no	no	no	yes	20	0	791	0	73	49	0	665	
107	no	no	no	roof	25	0	742	0	73	47	0	roof	
108	no	no	no	roof	22	0	752	0	72	44	0	roof	
117	no	no	no	yes	20	0	978	0	71	53	0	830	
118	no	no	no	yes	17	0	784	0	71	52	0	625	
122	no	no	no	yes	0	0	676	0	70	51	0	600	
123	no	no	no	yes	0	0	615	0	70	51	0	488	
128	no	no	no	no	25	0	1200	0	72	53	0	off	reactivate unit ventilator
132	no	no	no	yes	24	1	1033	0	73	51	0	875	
133	no	no	no	yes	25	1	805	0	74	52	0	594	
136	no	no	no	yes	25	0	1152	0	74	50	0	982	increase fan speed, check fresh air damper position
media center	no	no	no	roof	20	0	703	0	71	49	0	roof	
151	no	no	no	roof	0	0	627	0	71	48	0	roof	
149	no	no	no	roof	0	0	513	0	72	47	0	roof	
				Average	16	0	813	0	72	50	0	712	

School Name **Malcolm E. Nettingham Middle School**

Inspection Type **Mold/Air Quality Inspection**

Date of inspection **6/1/2026**

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



Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-									
104	no	no	no	no	1	0	719	0	72	46	0	off	reactivate unit ventilator
108	no	no	no	no	1	0	649	0	72	41	0	off	reactivate unit ventilator
110	no	no	no	yes	1	0	705	0	72	51	0	575	
115	no	no	no	yes	5	0	690	0	72	41	0	554	
120	no	no	no	no	0	0	549	0	72	41	0	roof	
118	no	no	no	roof	12	0	630	0	74	37	0	roof	
119b	no	no	no	roof	20	0	954	0	73	43	0	roof	
library	no	no	no	roof	8	0	685	0	72	41	0	roof	
138 nurse	no	no	no	roof	5	0	636	0	73	40	0	roof	nurse concerns over cockroach and mouse droppings. consult IPM vendor
202	no	no	no	yes	18	0	848	0	72	43	0	646	
205	no	no	no	yes	25	0	1175	0	72	45	0	874	
208	no	no	no	yes	25	0	1285	0	72	46	0	925	open windows when crowded
210	no	no	no	yes	10	0	854	0	73	42	0	580	
214	no	no	no	yes	2	0	797	0	73	46	0	621	
218	no	no	no	yes	20	0	940	0	74	43	0	924	
302	no	no	no	yes	16	0	860	0	74	42	0	730	
307	no	no	no	yes	24	0	1132	0	74	42	0	695	
311	no	no		yes	25	2	1140	0	74	44	0	900	
313	no	no	no	yes	20	0	1140	0	73	43	0	558	
316	no	no	no	yes	1	0	1046	0	73	42	0	690	
319	no	no	no	yes	0	0	858	0	73	41	0	536	
				Average	11	0	871	0	73	43	0	701	

School Name **School One Elementary**
 Inspection Type **Mold/Air Quality Inspection**
 Date of inspection **6/2/2026**



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

Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-			462	0	71	42	0	-	
101	no	no	no	roof	0	1	804	0	72	47	0	roof	
103	no	no	no	roof	24	0	835	0	72	48	0	roof	
105	no	no	no	roof	16	1	950	0	72	47	0	roof	
108	no	no	no	roof	1	0	852	0	72	47	0	roof	
110	no	no	no	roof	20	0	972	0	72	48	0	roof	
112	no	no	no	roof	20	0	923	0	72	48	0	roof	
201	no	no	no	roof	20	2	776	0	72	44	0	roof	
203	no	no	no	roof	25	0	733	0	72	46	0	roof	
205	no	no	no	roof	25	0	893	0	72	46	0	roof	
208	no	no	no	roof	24	0	1175	0	71	49	0	roof	check fresh air damper open windows
210	no	no	no	roof	20	0	997	0	71	47	0	roof	
212	no	no	no	roof	12	0	746	0	72	44	0	roof	
				Average	17	0	888	0	72	47	0	-	

School Name **Brunner Elementary**

Inspection Type **Mold/Air Quality Inspection**

Date of inspection **6/2/2026**

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



Location	visible mold	Musty Odors?	Visible Water Damage?	HVAC running	# Persons Present	Windows Open?	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)	°F	Relative Humidity %	VOC	CO2 @ Supply	notes
outside	-	-	-	-			411	0	82	30	0	-	
105	no	no	no	no	16	0	1540	0	74	47	0	off	reactivate unit ventilator
107	no	no	no	yes	0	0	729	0	74	36	0	547	
111	no	no	no	off	20	0	1400	0	72	51	0	off	reactivate unit ventilator
115	mo	no	no	yes	25	0	1439	0	71	50	0	950	open windows when crowded
119	no	no	no	yes	25	0	1275	0	71	48	0	1065	open windows when crowded
121	no	no	no	no	20	0	1162	0	69	52	0	off	reactivate unit ventilator
125	no	no	no	roof	25	0	1185	0	70	50	0	roof	
129	no	no	no	roof	1	0	1138	0	69	51	0	roof	
Media Center	no	no	no	roof	6	0	1166	0	70	50	0	roof	check fresh air damper
201	no	no	no	yes	25	0	1020	0	70	46	0	517	
203	no	no	no	yes	25	0	1300	0	70	51	0	976	open windows when crowded
206	no	no	no	yes	25	0	1636	0	70	46	0	1400	check fresh air damper position...open windows when crowded
208	no	no	no	yes	3	0	1040	0	69	47	0	760	
				Average	17	0	1233	0	71	48	0	888	