IEA, INC.

2017 – 2018 IAQ Walkthrough



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Jordan Public Schools

Elementary School

Inspection Date 03-14-2018

Observations and Air Quality Measurements

Room / Location	Time	Number of Occupants	CO2 (ppm)	CO (ppm)	RH (%)	Temp. (F)	Comments/Observations
Main Office	11:13 AM	2	650	1	21	68	
16	12:19 PM	22	534	1	18	70	
17	12:21 PM	1	588	1	10	70	
21	12:22 PM	1	530	1	16	71	
24	12:23 PM	24	494	1	16	72	
26	12:24 PM	24	541	1	16	73	
28	12:25 PM	1	649	1	16	73	
29	12:27 PM	1	834	1	18	72	
31	12:28 PM	3	745	1	17	72	
37	12:29 PM	1	741	1	17	72	
39	12:31 PM	1	633	1	16	71	
42	12:38 PM	1	610	1	16	71	
43	12:40 PM	2	576	1	16	71	
46	12:42 PM	1	539	1	16	71	
Media Center Library Pit	12:44 PM	15	538	1	15	72	
48	12:47 PM	8	598	1	16	73	
30	12:50 PM	1	487	1	16	73	
67	12:52 PM	1	617	1	17	73	
66	12:55 PM	3	668	1	18	73	
69	12:56 PM	25	726	1	18	73	
72	12:58 PM	23	726	1	19	73	
74	12:59 PM	21	856	1	20	73	
75	1:00 PM	1	994	1	22	73	
80	1:02 PM	5	817	1	19	74	
79	1:02 PM	2	694	1	18	73	
83	1:04 PM	1	723	1	19	73	
84	1:05 PM	5	632	1	17	72	
Cafeteria	1:07 PM	130	1107	1	29	73	
94	1:09 PM	17	692	1	18	75	
95	1:12 PM	1	653	1	16	75	
97	1:13 PM	15	769	1	17	75	
Kitchen	1:14 PM	3	987	1	29	75	
Outdoors	1:16 PM	0	376	4	36	44	

Observations and air sampling results are outlined in the following table:

Summary of Concerns & Recommendations

See below for IEA's list of concern areas and recommendations:

Indoor Air Quality Parameters/Guidelines

IEA recorded areas with humidity levels outside the ASHRAE recommended range of 30-60%. Relative humidity levels identified in areas listed below were found to be outside these guidelines. Low humidity levels tend to dry mucous membranes which may result in increased susceptibility to irritation. An evaluation of the ventilation system controls, performance and operation is recommended. Low relative humidity is common in buildings during the heating season.

All rooms

IEA did not record areas with carbon dioxide measurements over 1,200 ppm in the building. IEA considers carbon dioxide measurements above 1,200 ppm as an indication of a possible ventilation issue.

During the heating season, ASHRAE recommends that temperatures be between 68° and 75° F. All areas tested were within the temperature range.

IEA considers carbon monoxide over 5 ppm to be a possible indication of ventilation and/or equipment issues. If elevated levels are found, the systems and equipment in locations with elevated carbon monoxide should be assessed. IEA did not record any areas with elevated carbon monoxide levels.

Odors

Odors were not detected during the site visit in the building.

Water Stained Ceiling Concerns

Water-impacted ceiling materials should be replaced when discoloration or water staining is observed. Water-impacted ceiling materials can be a source for microbial growth. The source for the moisture infiltration should be investigated and repaired.

No rooms

Visible Fungal Growth Concerns

Building materials with visible fungal growth should be removed and/or cleaned under controlled conditions, per the New York City Guidelines (<u>https://www1.nyc.gov/assets/doh/downloads/pdf/epi/epi-mold-guidelines.pdf</u>) or following the Institute of Inspection, Cleaning and Restoration (IICRC) S520 *Standard and Guide for Professional Mold Remediation* to prevent possible contamination of adjacent locations and impact to building occupants.

No rooms

Efflorescence Concerns

During the walkthrough, IEA did not identify areas with efflorescence.

Bubbling/Peeling Paint Concerns

IEA did not observe bubbling/peeling paint in areas throughout the building.

Condensation Concerns

IEA did not observe any areas where condensation was forming.

<u>Plants</u>

Plants in an occupied location can be a source of allergens to sensitized individuals due to the pollen and soil mold. It is recommended that plans be removed from locations occupied by sensitized individuals. If plants are to remain in the area, the following actions are recommended:

- Water plans from the bottom to aid in preventing fungal growth on the soil surface
- Do not locate plants on top of air unit ventilators, if present in a room, to prevent soil and leaves from falling into the units.
- Do not locate plants near air supply diffusors, this will limit air currents over the plants and may prevent pollen or mold spores from becoming airborne.

No rooms

Taxidermy

IEA did not observe areas with taxidermy mounts present.

Live Animals

During the walkthrough, IEA did not observe live animals.

Poor Airflow

Poor airflow was not identified in areas of the building during the site visit.

Poor Housekeeping

Areas identified by IEA as having poor housekeeping (excessive clutter, excessive dust/debris on horizontal surfaces, etc.) were not observed within the building.

Structural Failure

IEA did not observe areas in which external and/or internal structural failure was present.

Blocked Air Diffusors

IEA did not observe blocked air diffusors in areas of the building during the site visit.