

IEA, INC.

2022 - 2023 IAQ Walkthrough



Contact Us:

BROOKLYN PARK OFFICE

9201 W. BROADWAY, #600
BROOKLYN PARK, MN 55445
763-315-7900

MANKATO OFFICE

610 N. RIVERFRONT DRIVE
MANKATO, MN 56001
507-345-8818

ROCHESTER OFFICE

210 WOOD LAKE DRIVE SE
ROCHESTER, MN 55904
507-281-6664

BRAINERD OFFICE

601 NW 5TH STREET SUITE #4
BRAINERD, MN 56401
218-454-0703

MARSHALL OFFICE

1420 EAST COLLEGE DRIVE
MARSHALL, MN 56258
507-476-3599

VIRGINIA OFFICE

5525 EMERALD AVENUE
MOUNTAIN IRON, MN 55768
218-410-9521

www.ieasafety.com

info@ieasafety.com

800-233-9513

Saint Paul Public Schools Hazel Park Academy

Walkthrough Date:
Thursday, January 12, 2023
Retest Date: March 22, 2023

Project Description

IEA conducted an Indoor Air Quality (IAQ) walkthrough at Hazel Park Academy by IEA representative, Eddie Anderson. This walkthrough was conducted with the intent of gathering basic air quality and visual observations which will assist the District in making informed and proactive decisions to improve and maintain acceptable air quality in the building. This walkthrough is based upon the Environmental Protection Agency's (EPA's) Tools for Schools IAQ guidelines.

Some observations gathered during the walkthrough may identify issues which may require additional testing, evaluation or further investigation.

The findings, conclusions and recommendations presented herein are believed to be accurate and representative of the building on the date and time of the walkthrough.

GENERAL COMMENTS

The analysis and opinions expressed in this report are based upon data obtained from Saint Paul Public Schools at the indicated locations. This report does not reflect variations in conditions that may occur across the site, property, or facility. Actual conditions may vary and may not become evident without further assessment.

The report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted indoor air quality practices. Other than as provided in the preceding sentence, no warranties are extended or made.

Building Information

General information regarding the building was collected during the walkthrough. The information gathered during this process is a vital component, as it is helpful in determining how these items may play a role in possible IAQ related issues.

Below is a summary of the information gathered during the walkthrough:

- The building has two (2) floors.
- The building has not had recent construction.
- There are operable and inoperable windows in the exterior rooms within the building.
- The building was originally constructed in 1956.
- The building does not utilize walk-off mats.
- There are below grade floors.
- There are no tunnels under portions of the building.

Observations Summary and Air Quality Measurements

Room / Location	Number of Occupants	Odor Present	Observations	Dust Accumulation	CO ₂ (ppm)	CO (ppm)	RH (%)	Temp (°F)
OUTDOORS					432	0.2	31.6	23.0
CUSTODIAL OFFICE	1	No		No	875	0.6	21.9	71.2
COMPUTER LAB	0	No	<ul style="list-style-type: none"> Stained Ceiling Tiles 	No	489	0.4	21.1	68.0
1305	17	No	<ul style="list-style-type: none"> Stained Ceiling Tiles 	No	913	0.4	23.7	69.3
1307	12	No		No	869	0.4	22.8	70.0
1309	13	No	<ul style="list-style-type: none"> Stained Ceiling Tiles 	Yes Horizontal Surfaces	786	0.4	22.2	70.9
1311	9	No	<ul style="list-style-type: none"> Stained Ceiling Tiles 	Yes Horizontal Surfaces	923	0.4	22.0	70.7
1313	2	No	<ul style="list-style-type: none"> Stained Ceiling Tiles 	No	647	0.4	21.0	70.0
1315	16	No	<ul style="list-style-type: none"> Stained Ceiling Tiles 	No	1,032	0.5	24.3	70.5
1317	2	No		Yes Horizontal Surfaces	627	0.5	21.4	68.9
1319	13	No		No	690	0.5	21.3	69.3
1321	2	No	<ul style="list-style-type: none"> Stained Ceiling Tiles 	No	595	0.5	21.6	69.1
1320	5	Yes Musty	<ul style="list-style-type: none"> Stained Ceiling Tiles 	No	652	0.5	21.4	70.2
1318	14	No		No	984	0.5	24.3	70.2

Room / Location	Number of Occupants	Odor Present	Observations	Dust Accumulation	CO ₂ (ppm)	CO (ppm)	RH (%)	Temp (°F)
1316	12	No		No	950	0.6	23.7	69.8
1314A	1	No		No	674	0.5	21.8	69.8
1314 STORAGE COMPUTER ROOM	1	No		No	695	0.5	23.4	69.1
1312A	22	No		No	982	0.5	24.5	69.8
1312	0	No		No	613	0.5	20.6	69.8
1310	8	No	• Aquariums (fish)	No	813	0.5	22.8	70.5
1308	14	No		No	1,037	0.5	23.0	71.6
1306	15	No		No	1,054	0.6	23.4	70.9
1302	0	No		No	623	0.5	20.1	70.7
MEDIA CENTER	20	No		No	983	0.5	22.5	70.7
1402	0	No		No	509	0.6	19.7	70.9
1403	6	No		No	654	0.5	20.4	72.2
1404	0	No		No	521	0.5	19.9	71.1
1205	2	No		No	978	0.6	22.5	69.8
1202	2	No		No	770	0.5	22.1	70.9
1201	1	No		No	622	0.5	20.9	70.5
1107	2	No		No	652	0.4	21.1	70.0
1104	0	No		No	580	0.5	20.4	70.0
1012	0	No		No	662	0.5	21.0	70.3
1011	2	No	• Plants	No	783	0.5	20.6	71.2
1013 COT ROOM	0	No		No	612	0.5	19.9	70.0
1014	1	No		No	774	0.5	20.5	70.7
1015	0	No		No	868	0.5	20.9	72.1
1002	2	No		Yes Air Return	672	0.5	19.8	71.8
1008	0	No		No	630	0.5	19.6	70.9
1004	0	No	• Plants	No	599	0.5	17.2	74.8
1007	1	No		No	768	0.5	20.9	73.8
1006	0	No		No	672	0.5	19.3	72.5

Room / Location	Number of Occupants	Odor Present	Observations	Dust Accumulation	CO ₂ (ppm)	CO (ppm)	RH (%)	Temp (°F)
1005	1	No	• Plants	No	658	0.5	19.0	72.9
1003	0	No		No	631	0.6	19.4	71.1
1101	0	No		No	460	0.4	18.5	69.8
1114	32	No		No	888	0.4	23.1	73.9
KITCHEN	1	No		Yes Air Return	791	0.6	23.5	73.8
1113	1	No	• Plants	No	902	0.6	24.7	73.0
1110	0	No		No	621	0.5	20.2	71.5
2301	0	No	• Plants	No	582	0.5	19.3	69.3
2402	0	No		No	519	0.4	19.9	70.2
2401	0	No		No	547	0.4	19.2	70.7
2303	14	No		No	1,013	0.5	23.7	70.7
2305	30	No		No	1,139	0.5	24.3	70.3
RETEST 2305	25	No		No	1,008	0.0	30.3	67.4
2307	1	No		No	612	0.4	20.1	70.2
2309	0	No	• Stained Ceiling Tiles • Plants	No	615	0.5	20.1	70.3
2311	12	No		No	983	0.5	23.1	71.2
2313	11	No	• Plants	No	972	0.5	23.8	72.3
2315	9	No	• Stained Ceiling Tiles	No	761	0.5	20.4	72.1
2317	14	No		No	869	0.5	21.9	71.8
2319	1	No		No	629	0.5	19.8	70.2
2321	0	No		No	615	0.5	19.8	70.0
2322	0	No		No	678	0.4	20.0	71.1
2320	16	No		No	983	0.5	22.8	70.7
2314	12	No		No	912	0.5	25.9	71.4
2312	8	No		No	1,252	0.5	24.5	72.1
RETEST 2312	1	No		No	935	0.0	26.2	69.3

Room / Location	Number of Occupants	Odor Present	Observations	Dust Accumulation	CO ₂ (ppm)	CO (ppm)	RH (%)	Temp (°F)
2310	2	No		No	653	0.5	19.6	71.5
2308	5	No		No	974	0.5	21.4	70.7
2304	0	No		No	638	0.5	20.6	69.8
2306	0	No	• Plants	No	651	0.5	20.5	70.3
2306A	2	No		No	796	0.6	22.2	69.6
2304	12	No		No	842	0.5	23.5	68.9
2302B	0	No		No	626	0.5	20.8	68.5
2302A	7	No		No	887	0.4	23.5	69.6
2318	15	No		No	995	0.5	23.8	69.8

Summary of Concerns & Recommendations

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

Indoor Air Quality Parameters/Guidelines

IEA recorded area(s) with carbon dioxide measurements above 1,200 ppm in the room(s) listed below. IEA considers carbon dioxide measurements above 1,200 ppm as an indication of a possible ventilation issue. The ventilation system(s) serving the location(s) with these levels should be evaluated.

- 2312

After IEA completed the initial IAQ walkthrough, the ventilation system(s) serving rooms with carbon dioxide measurements at or above 1,100 ppm were evaluated by SPPS. After ventilation adjustments or repairs were made, IEA returned to those rooms on March 22, 2023, to repeat the walkthrough. The “retest” data is included in this report for reference.

IEA recorded area(s) with humidity levels outside the ASHRAE recommended range of 30 - 60%. Relative humidity levels identified in area(s) 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. Elevated humidity levels can lead to condensation and provide conditions conducive to fungal growth. Low relative humidity is common in buildings during the heating season. An evaluation of the ventilation system controls, performance and operation is recommended.

- IEA identified seventy-five (75) rooms with relative humidity levels below 30%. However, this is common for non-humidified buildings during the heating season and is not considered an issue.

IEA recorded area(s) with temperatures outside the recommended range. During the heating season, ASHRAE recommends that temperatures be between 68°F and 75°F. Evaluation of temperature controls and/or ventilation system performance and operation is recommended.

- RETEST 2305

Odors

Odors were detected during the site visit in the building. If the source of the odor cannot be easily identified, IEA can provide further investigation or recommendations.

- 1320 *Musty*

Stained Ceiling Tiles

Stained ceiling tiles were found in the room(s) shown below. The impacted ceiling tiles should be removed and replaced, and the cause of the moisture repaired.

- 1305
- 1309
- 1311
- 1313
- 1315
- 1320
- 1321
- 2309
- 2315
- COMPUTER LAB

Plants

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 plants be removed from locations occupied by sensitized individuals. If plants are to remain in the area, IEA recommends that plants should not be placed near air unit ventilators or air supply diffusers. Additionally, plants should be watered from the bottom. These measures will help control pollen and mold spores from becoming airborne.

- 1004
- 1005
- 1011
- 1113
- 2301
- 2306
- 2309
- 2313

Live Animals / Aquariums

IEA observed live animal(s). Prior to having animals, the Building Principal should be consulted. Consult parents about potential allergies in a take-home note with students or during parent-teacher conferences. IEA recommends that the animal and cages/cases are regularly cleaned/maintained and stored away from air supply and return vents.

- 1310

Dust Accumulation

IEA observed dust accumulation in the following room(s) and recommend that the specified area is wiped clean using a damp rag.

- 1002 *Air Return*
- 1309 *Horizontal Surfaces*
- 1311 *Horizontal Surfaces*
- 1317 *Horizontal Surfaces*
- KITCHEN *Air Return*