

MEMO

TO: George Zlock

FROM: Lora Dewey 

DATE: 1-28-19

RE: 1-9-19 Indoor Air Quality (IAQ) Survey at St. Francis

At the District's request, a baseline IAQ survey was performed at St. Francis School on 1/9/19. Test areas were randomly selected on each floor. The baseline survey is a snapshot in time and included the following variables:

- presence of visible mold, relative humidity, temperature, ventilation, presence of hydrogen sulfide, carbon monoxide, carbon dioxide, flammable gases & oxygen.ⁱ

The purpose of the sampling was to address staff concerns regarding IAQ in St. Francis. Please see results below:

Results:

Location	Mold (Y/N)	RH	Temp (F)	Vent (on/off)	H2S ppm	CO ppm	LEL %	O2 %	CO2 ppm	Notes
Gym (Locker room end)	no	28.1	62.8	off	0	0	0	20.9	503	Water stains on ceiling, odor
Gym (classroom end)	no	28.1	62.8	off	0	0	0	20.9	503	Water stains on ceiling, odor
106	no	27.5	66.0	N/A	0	0	0	20.9	617	
103	no	27.3	63.6	N/A	0	0	0	20.9	662	

Location	Mold (Y/N)	RH	Temp (F)	Vent (on/off)	H2S ppm	CO ppm	LEL %	O2 %	CO2 ppm	Notes
Café (Kitchen end)	no	25.3	60.6	off	0	0	0	20.9	534	Water damaged walls/ceiling
Café (tunnel end)	no	25.3	60.6	off	0	0	0	20.9	534	Water damaged walls/ceiling
Kitchen	no	24.5	61.2	off	0	0	0	20.9	527	Outside air from hood
201	no	28.5	67.0	N/A	0	0	0	20.9	538	
205	no	28.6	65.4	N/A	0	0	0	20.9	756	
200B (nurse)	no	28.6	65.5	N/A	0	0	0	20.9	568	
308	no	29.3	67.3	N/A	0	0	0	20.9	562	
302	no	28.6	64.9	N/A	0	0	0	20.9	558	
305	no	27.5	65.2	N/A	0	0	0	20.9	560	
Control	no	24.8	73.0	on	0	0	0	20.9	617	

Discussion:

The testing was performed before the normal work day. Outdoor temperatures were lower than the minimum operation temperatures of the instruments, therefore the control sample was taken indoors at another location. Results showed relative humidity was a bit lowⁱⁱ; all other sample analytes were within normal ranges at the time of survey.ⁱⁱⁱ

Recommendations:

Because this basic survey was driven by staff concerns and not performed by a certified industrial hygienist (CIH), I recommend contacting Peter Moles, PESH, CIH at 315-479-3441. His consultation is free and he has been very helpful in calming concerns in similar situations at other districts. Please feel free to contact me if you need anything else (739-3581, X1403 or 738-8740).

ⁱ The following instruments were calibrated and used as per manufacturer's instructions: TSI VelociCalc, TSI IAQ Trak and BW 4 gas meter.

ⁱⁱ ASHRAE comfort guidelines for RH are 30-50%

ⁱⁱⁱ As per ASHRAE standards.