TO: David Kallie, CEO, CR, CAP- Dimension, Design, Build, Remodel Inc

FROM: Martine Davis, Certified Building Biologist, Indoor Environmental Testing Inc.

REPORT DATE: October 19, 2021

RE: Environmental testing for the property at 3327 47th Ave Kenosha WI

The data below represents our findings for the environmental testing conducted at this property on August 10.

Instruments were used to collect air quality parameters such as temperature, relative humidity, carbon dioxide levels (a surrogate measurement for fresh air and ventilation), Formaldehyde, Volatile Organic Compounds (VOCs), PM2.5 and PM10 particles and airborne mold counts. Instruments were used to collect EMF (Electro-Magnetic Fields) readings.

The table below provides your results along with the average for a typical new construction single family home. As you will note, the air quality and EMF measurements achieved in this residence are superior to the average dwelling so congratulations on achieving such great results!

Component Unit of Meas.	R.H. %	CO_2 PPM	CH_2O PPB	VOCs Ng/L	Mold p/m3	PM2.3 Ug/m3	Mold VOCs	Magn Fields nT	Elec Fields V/m	RF mW/m2
Outside/Standard	71-73%	441	23	0.23	4,399	11.7	NA	NA	Varies	206
MBR	49	501	45	650	174	7	<3	2	5	18
Kitchen/DR/LR	51	526	45	650	494	7	<3	2	6	15
Basement	55	NA	NA	NA	147	12	<3	NA	NA	NA
Average New Home	Varies	1200-1800	79-180	1,900	2K-20K	15-40	NA	2-200	12-50+	2000 to 200,000+

CH_2O = Formaldehyde
ug/m3 = Microgram/m^3 of air
PPB/M= Parts Per Billion/Million

mW/m2 = microwatts/square meter
ng/L = Nanograms/liter of air
RF=Radio Frequencies/Cell Tower Radiation

p/m^3= Particles per cubic meter of air
nT = NanoTesla
V/m= Volts per meter

Note: Future readings will vary based on the occupants' activities and electronics

Relative humidity: Excellent
The American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE) has a voluntary standard for human occupancy which recommends a minimum 30% Relative Humidity in the winter for temperatures between 68.5- and 76-degrees Fahrenheit. When indoor relative humidity is below 30% — nose irritation and inflammation can occur as can sore throats, chronic sinus infections, eye and skin irritation, nose bleeds and sneezing. During summer months, relative humidity should be below 58% to avoid mold growth.

If using humidifiers in the winter months to bring humidity up to 30%, avoid cold mist humidifiers which can grow a multitude of bacteria. Choose steam mist type humidifiers. Whole house humidifiers must be meticulously maintained and cleaned to avoid drips and mold in the HVAC system.

Carbon Dioxide: Excellent
The average for an occupied home (new construction) is 1200-2000 ppm. New homes are built very tight and exceed the recommended level of Carbon Dioxide. This makes the space feel stuffy and stale. Make-up air is needed in new(er) homes. The levels recorded in this home were very good due to the added fresh air exchange.

VOCs: Low-Average
The VOC levels in this home were reported by the lab at 650 ng/L. The average home registers 1900 ng/L and sometimes higher for new construction.

Formaldehyde: Moderately Elevated
Formaldehyde values as reported by the lab were 45 ppb. The average new construction registers well over 100 ppb for the first several months, sometimes years depending on the ventilation rate.

Mold: Excellent

Mold spores are present in the air inside and outside at all times. What's not acceptable indoors are water-damage indicator molds which are different species than outdoor molds. These water-damage indicator molds can be toxic and may affect occupant health, this is why homeowners should be concerned about these.

When interpreting mold counts, there are no pass-fail criteria and no set government guidelines, partly because individual responses to mold vary considerably. Individuals with mold allergies or those sensitized to mold during a previous exposure to a water-damaged building may have severe reactions to minute quantities of mold while others may have no reaction at all.

Generally, indoor mold counts should be less than outdoor mold counts and of similar species to other indoor environments for similar settings. In this case, mold counts were substantially lower than outdoor counts and lower than the average residential setting. The species recovered in the home were typical outdoor species commonly seen in all households.

Fiberglass Fibers: Elevated (93 to 213 particles/m3 air)

Fiberglass fibers were recovered from every air sample collected (LR, MBR and Basement). In discussing this finding with David Kallie at Dimension Design, it was surmised the anomaly was likely caused by a disturbance of insulation by workers shortly before the testing. A normal count on fiberglass particles is zero. As long as the source of the fiberglass was

eliminated, there should be no further issues but if occupants experience symptoms such as scratchy eyes, nasal, throat or skin irritation or itching, the air should be tested again to check if fiberglass is still present. HEPA air purifiers are effective at removing fiberglass after the source has been eliminated however, if the source remains so will the airborne particles.

Fine (PM2.5) airborne particle matter: Excellent

The EPA's National Ambient Air Quality Standards (NAAQS) define the amount in weight (expressed as particle mass PM) of fine particles smaller than 2.5 microns and coarse particles smaller than 10 microns that are acceptable for ambient air. The NAAQS standards are used to regulate air pollution in U.S. cities and are also often referred to by regulatory agencies (OSHA) and non-governmental organizations (NIOSH, ACGIH, ASHRAE) as thresholds to judge the quality of indoor air as well. The current fine particle (PM2.5) exposure standard is **35 µg/m3** and the coarse particle (PM10) exposure standard is **150 µg/m3.**

Conclusion:

All parameters measured indicate very good air quality with ample ventilation and fresh air entry, low mold counts, low particle counts, and better than average VOCs and formaldehyde for new construction. Based on the results of our assessment, we do not have any further recommendations at this time. Thank you for the opportunity to serve you.

Appendix A. Limitations of Testing/Disclaimer

- Please note that our sampling is only a "snapshot" of conditions and air quality at a particular point in time. Indoor Air Quality has many variables and can fluctuate throughout the day.
- Mold testing has limitations. Low mold counts on lab test results do not rule out hidden mold contamination in wall or ceiling cavities, under flooring, behind insulation, etc. … Also, a low mold count in one area does not rule out microbial contamination in a nearby, untested area.
- The conclusions and recommendations presented in this report are based solely on the conditions observed and tests taken at the time of the site visit, and should not be relied upon to be representative of conditions at any other time.
- We cannot make any claims regarding the presence or absence of indoor air pollutants or contaminants other than those actually tested.
- We can make no assumptions as to conditions present in rooms which we did not test.
- Mechanical and visual inspections are limited to those items to which we have physical and visual access.