

Full Report

Sample

EMF Inspection observations and recommendations Part 1

Rex Funk - 2025.1.28



HEALTHY HOME CONSULTING

Electromagnetic Field Exposure Indoor Environmental Quality

Inspections Mitigation Services

EMF Inspection Report 1 Full Check Prepared for:

Client SAMPLE Address XXXX Phone XXXXX Service Date 1/18/2025



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EMF Inspection, Report 1 Service Date:1/28/2025

About the house	General	2 story half split, 3 bedroom, cedar shakes siding, wood framing, drywall		
Location	Address			
	Setting	Urban, neighbors 30 - 100 ft away		
Client concerns		General EMF exposure assessment, "Is there something wrong with the house, should we move?" "Why do I still feel bad in the house after mold remediated and using air filters?" VOC and CO ₂ monitor read high sometimes.		
EMR Sources Exterior	Cell towers/ antennas	Several towers	Proximity 0.3, 0.8, 1.1m	iles
	Distribution lines	Along the road	Above ground	Proximity about 50ft
EMR Sources Interior		Smart meter, WiFi, cell phones, computers, printer, smart water meter, stereo, speakers, TVs, baby monitor, other		
Water source		Municipal		
Accessibility		Good		
Scope and purpose of		Assess electromagnetic radiation exposure in home, search for cause of problems		
Instruments used	RF Radio Frequency	Safe and Sound Pro II, 200 MHz to 8 GHz Gigahertz Solutions HF59 B, Log Per and UBB antennas, 27 MHz to 3 GHz		
	EF Electric Field	Gigahertz Solutions NFA1000, 3 axis, 5Hz - 1 MF UNI-T UT61D, tRMS 6000 Counts DMM	Ηz	
	MF Magnetic Field	Gigahertz Solutions NFA1000, 3 axis, 5Hz - 1 MF	Ηz	
	MEP Microsurge Electrical Pollution	Line Noise Meter, EMF Services LNM1 Stetzerizer Microsurge Meter GS-M300-A PicoScope 2204A Owon SDS 7102V Stetzer ubiquitous filter Differential probe		
	AC Current	Ruoshui 140A Clamp Leaker, 0.000 mA - 60.00 A RouShui 6800 Clamp Leaker, 0.00 mA - 1200 A		
Qualification of technician	Rex Funk	Building Biologist: EMRS, BBEC, BBNC		
Reference to standard		Guideline BBI SBM-2015 and Protocol IBE TP01	-2018	
Deviation from standard		None		



EMF Inspection

Thank you for asking me to conduct an EMF survey of your home. Below are the explanations of what I found. See the Background Information pages at the end of this document to learn more about the health risks regarding low level EMF exposure and other toxins normally found in houses.

The following report is documentation of what I found at the time of measurement and observation. Levels are subject to change throughout the day and year, and sources may change as well. Due to this limitation, this information is not to be interpreted as a quantification of the entire possible EMF exposure risk.

This survey is based on the Building Biology Institute Guidelines for healthy home design which is founded on a multitude of scientific studies.

Summary

Discussion

EMF Notes

In terms of EMF exposure, your house is not under extreme influences that cannot be controlled. The power line AC magnetic field is higher than ideal for sleeping areas, though not *very* high. Your child's bed location is slightly higher than yours. External wireless sources are also not very high, so reducing your own use will be the critical factor. However some shielding in bedrooms might be worth implementing. Electric fields are high, as typical, so it would be hard to find a house with lower EF levels in general. Dirty electricity was medium at the time of measurement which is also typical and can be reduced by removing internal sources and using a whole house filter to reduce the grid source.

Air Quality Notes

High CO_2 in homes is usually due to not enough fresh air and HVAC systems that aren't properly installed and maintained. See if you can link a high CO_2 reading with an activity such as cooking or using the dryer. You also have an open combustion gas water heater. Make sure it is properly vented or consider installing a direct vented water heater, which is safer. Many of your floors have laminate flooring. These and synthetic rugs can be a source of VOCs.

The crawl space treatment can also be a source of VOCs from the encapsulant paint, and possibly the new insulation, as well as the water proofing membrane. There are also a few gaps in the water proofing vapor barrier at the top and bottom where soil moisture can infiltrate. I recommend a specific no odor tape LINK. The sump basin lid is not tight and the condensate tube from the dehumidifier should go through a hole in the lid rather than under it.

Measurement Levels

- RF signal strength
 - Outside from external sources: Medium
 - Inside from external sources: Low Medium
 - Inside from internal sources: Very High
- AC magnetic field strength
 - Inside from external sources: Low
 - Inside from internal sources: Low, with occasional surges
- AC electric field strength
 - Inside from internal sources: High, as typical
- Dirty electricity
 - From the grid: Low
 - From the internal sources: Medium-High



Measurements, Observations, and Recommendations

High Frequency Radio/Microwave Radiation, RF, MW

Power Density in microwatts per square meter, µW/m², Peak values

Building Biology Institute Guidelines Hazard Level for sleeping areas	Instruments Used	Range
Ideal < 0.1	Safe Living Tech, Safe and Sound Pro II	200MHz - 8 GHz
Low 0.1-10	Gigahertz Solutions HF 59B	27 MHz - 2.7 GHz
Medium 10-1000	Gigahertz Solutions HF 59D	2.4 GHz - 10 GHz
High > 1000		

Discussion

RF MWs are wireless communication signals produced by cell towers, cell phones, radio towers, cordless phones, Bluetooth, WiFi, microwave ovens, and all wireless communication devices. This is digital data in the form of electrical pulses using the air as the "wire," traveling long distances in some cases. They are able to move through many solid objects. Such artificial waves are produced at high frequencies which are foreign to biological forms, and these days they are around us all of the time. The cells of our bodies use electrical pulses for normal function and get "confused" when bombarded by these chaotic external influences. While the strength of these waves may be very weak compared to home power, it is still able to do harm.

Observations

- Outside the home RF levels were medium, around 108, 135, 186 $\mu W/m^2$

- The closest cell towers are about 0.3 to 1.1 miles away
 - Though the antennas on the water tower are only 0.3 miles away, much of the signal strength is blocked by houses, trees, and terrain
 - Though the adjacent houses are only about 50 feet away, there was not a strong signal from their WiFi and other wireless devices — which I am assuming are present as is typical
- Inside the home, with internal sources OFF, peak levels were around 3.2, 10, 23, 38 μW/m²
- Inside the home, with internal sources ON, peak levels were around 3,760, 8,000, 12,600, 210,000 μ W/m²
 - · Strength depends on proximity to sources; the closer the stronger
 - · Measurements were taken in general areas of the home as noted on the map in the appendix
 - Sources include:
 - Transmitting electric meter, WiFi, cell phones, computers, printer, transmitting water meter, stereo, speakers, baby monitor, ear buds, other
- · Client's cell phone and WiFi are the highest sources of RF
 - For reference, in close proximity these can range around 10,000, 500,000, 2,000,000 μ W/m² or more

Recommendations

- As a lifestyle choice, reduce your use of wireless devices drastically
- While they are convenient, the health risk makes it a questionable choice, as identified in many thousands of peer reviewed independent studies - <u>LINK 1</u> - <u>LINK 2</u>
- Use a wired landline for phone calls
 - Ask your internet service provider about voice over internet protocol, VOIP
 - · You can set your cell phone to forward calls to your landline number when you are home
 - You can also set up a Google Voice number and call through your computer
 - it can connect to your cell phone as well
- Keep your cell phone a good distance away from you and others in general if you need to hear it ring
 - Better would be to leave it disconnected most of the time and check it throughout the day
 Airplane mode ON, WiFi OFF, Bluetooth OFF
- Read and compose text messages in airplane mode, then turn airplane mode off to press send



- · Use your tablets and cell phone with an ethernet adapter
 - example Link 1, Link 2
- while in airplane mode with WiFi off, the cell phone can use data, but not calls or text
- · Install hard wired internet connections throughout the house
 - I suggest the following setup
 - After the modem, use a wired only router LINK
 - Install ethernet cables to all stationary internet connected devices
 - Also run cables to places you want to connect occasionally
 - Switches (splitters) can be used strategically to enable more connection points LINK
 - · For occasional wireless connections you can add a wireless access point anywhere in the house LINK
 - * Cover it with a 99% reduction shielding material if you want to weaken the signal
 - Two options, among many
 - Safe Living Technologies, laptop bag, 99% reduction, product link
 - Less EMF, Signal Tamer, 90-95% reduction, product link
 - With any option you can peel back the shielding as needed to allow more signal out for better connectivity
 - Be sure to turn it off at night using a timer can help
 - See the Appendix, "Bye Bye WiFi" for installation examples
- For sleeping areas, if you want to get into the ideal range, you could implement an RF shielding strategy
 - The bedrooms presently have levels around 23 to 38 μ W/m² when internal sources are off
 - A reasonable reduction goal would be below 10 µW/m²
 - Option to consider
 - 1) Put RF shielding film on bedroom windows LINK
 - ▶ 2) Make RF shielding curtains for walls and windows
 - * 97% reduction, more visibility LINK
 - * 99.9% reduction, less visibility LINK
 - 3) If you want to make blankets and clothing for you and your children, this is the best option <u>LINK</u>
 Max Wear is not surface conductive
 - ▶ 4) Install a bed canopy
 - * 99.9% reduction LINK 1
 - * 96% reduction LINK 2
- See the appendix for more details
- · You have an RF transmitting electric utility meter
 - See section "Utility Meters" below for details

AC Magnetic Fields, MF

Measured in MilliGauss, mG, 3D tRMS

Discussion

An AC MF is a result of electric current flow. Since an electric cable has a paired hot and a neutral wire, the current on each are equal but opposite, canceling the field of the other and keeping the MF near the cable. When a wire has current but does not have an equal opposing current next to it, the MF spreads out into the surroundings. This can happen when certain wiring errors are present in a home. It can also happen in the power lines on the street creating a field that tends to spread out vey far due to the amount of current in the wires. The water pipe bonding wire can be a MF source if it is carrying objectionable current, and so can any metal pipes or duct work in certain scenarios.



Observations

- Outside MF coming from the power lines was medium
 - 1.37 mG below the lines
 - 0.87 mG at the front door
 - 0.5 mG in the back
 - This field weakens with distance
- With the main breaker OFF, inside MF was generally higher toward the front of the house, around 0.7 mG
 - This degraded gradually to the rear, around 0.5 mG
 - $\boldsymbol{\cdot}$ Indicates that the power line MF is affecting the inside of the house as well
 - · I also measured with nearly all circuits, lights and outlets in the house ON
 - An elevated MF would suggest the presence of wiring errors
 - Much of the house seemed fine but a few areas became elevated
 - * Living room wall near the fireplace, likely related to the AC compressor outside
 - * Living room ceiling where the air handler is located
 - * Near the furnace in the laundry room
 - There were also surges up the 2.0 mG randomly as I made my way through the house
 - * Likely related to foreign current on the water pipe
- During my electric panel inspection I discovered two issues
- 1) The sub panel in the laundry room had a few wiring errors
 - The Neutral and Ground wires were inter-connected which is against electric code and creates elevated MFs
 - * This is because the electric cables become imbalanced since some current travels on the wrong wires
 - · Once this was corrected, the elevated areas related to the A/C system returned to normal
 - * There had been about 1.83 amps of net current (imbalance) on the A/C compressor electric cable and line-set pipes, but this was resolved by correcting the sub panel wiring
 - 2) The water bond wire that prevents the water pipe from becoming electrified was carrying 0.3 amps of current
 - This fluctuated from 0.03, 0.06 amps at times and then surged to about 0.3 amps occasionally
 - * This is most likely the cause of the random surges I detected throughout the house, caused by current traveling on ground wires and pipes, which is against electric code
 - By temporarily lifting the bond wire, the objectionable current on this "non-current carrying conductor" went away, demonstrating that the water pipe should not be used as a grounding electrode
 - * Instead two ground rods at the meter will satisfy the electric code for lightning protection
- There was a high MF near the furnace and water heater which does not reach far, but has me curious
 - · It may be a non-issue or it could be a local wiring error
 - This would need more investigation

Recommendations

• Licensed Electrician:

- Ensure that the grounding electrode conductor at the start of service is connected to two 8ft ground rods, at least 6ft apart, bonded to the same grounding electrode conductor
- · Connect the water bond wire to the copper water pipe after the plastic pipe section for the water filter
 - Provide a jumper over the plastic section if required



AC Electric Fields, EF

Measured in volts per meter, V/m, 3D tRMS, Potential Free measurement, EF

Building Biology Institute Guidelines Hazard Level for sleeping areas	Instruments Used	Range
Ideal < 0.3	Gigahertz Solutions NFA 1000	3 axis, 5Hz - 1 MHz
Low 0.3-1.5		
Medium 1.5-10		
High > 10		

Measured in millivolts, mV, Relative to remote earth, Body Voltage measurement, BV

Building Biology Institute Guidelines Hazard Level for sleeping areas	Instruments Used	Range
Ideal < 10	UNI-T UT61D True RMS Multimeter	6000 Counts DMM
Low 10-100		
Medium 100-1000		
High > 1000		

Discussion

An AC EF comes from house wiring and appliance cords. The fields can reach 6 to 8 feet from the wires and they travel through building materials. The EF is drawn to grounded conductive surfaces due to it's tendency to seek Earth as a zero point, similar to water seeking sea level. Our bodies also attract the EF. The AC EF changes polarity 60 times per second which has a disturbing effect on our cells since they are historically used to a more stable DC electric field.

Observations

 Using the Body Voltage method I determined which circuits are best to switch off at night for Bedrooms 1 and 2

- Bedroom 1, primary
 - Circuits 8, 10, 12
 - BV started at 3,220 mV and went down to 180 mV with these circuits off
- Bedroom 2, child
 - ▶ Circuits 2, 4, 8, 10
 - BV started at 2,500 mV and went down to 280 mV with these circuits off
- Since one of the circuits required for this powers the refrigerator, Circuit 12, an electrician will need to find a way to power the refrigerator from another circuit
- · See the appendix for EF measurement color coded bed maps
- Since both beds did not go down to the ideal range for sleeping areas, EF shielding could be implemented to achieve a greater reduction
 - This would require a second visit so I could accurately design an effective strategy and likely install it
 - Possibly using metal foil, metal mesh, or shielding fabric with fine metal threads, grounded to the outlet or the earth
 - * These could then be covered with decorative fabric or rugs
 - · Other options include an electrician cutting or moving some offending electric cables

<u>Recommendations</u>

- Switch of circuits 2, 4, 8, 10, 12 at night to reduce the EF at night while you sleep
 - Do this for a few weeks, if you find a benefit, install a remote cut-off switch so you can turn it off from your bedroom
 - EMF Safe Switch
 - Installed by an electrician
 - Contact me if you are interested in this option, I need to assist you with the order
- Have an electrician find a way to power the refrigerator for a circuit that wont be switched off at night
- If you want to get the EF even lower, contact me to schedule a return visit



Dirty Electricity, DE

No Set Guidelines Measured through observation using • Oscilloscope, goal < 300 mV peak • AM radio • Various plug in testers	Instruments Used	Range
	Owon SDS7102V oscilloscope	100MHz, 1GSa/s
	Picscope 2204A oscilloscope	10MHz, 8 bits at 100 MS/s
	Stetzerizer Microsurge meter GS-M300-A	180 Hz to mid KHz
	EMF Services	1.7 kHz to 2 MHz
	Line Noise Meter, LNM	

Discussion

DE is high frequency voltage spikes that affect all wires in the home and the grid. It is created primarily by digital devices and appliances that use a circuit board and switch mode power supplies. Large contributors include, solar power, variable speed appliances, dimmer switches, compact fluorescent bulbs, digital electric meters, mini splits, and computers. It makes the normal EF and MF "dirty" by adding chaotic voltage and amplitude changes. DE can come from the electric grid and from your own appliances in the home.

Observations

- Using the LNM I found that DE was low to high at the time of measurement
 - Since DE changes throughout the day, it is very challenging to capture all of the data
 For this reason I measured at three different times: 11:00, 2:30, 6:30
 - In the house with normal sources on, I found a range around 300, 700, 1270, 2200, 9600 mV peak
 - Using a dedicated outlet, with nothing plugged into it (or anywhere on that circuit) I measured what was coming from the grid on both legs of power, around 12:00 o'clock
 - Leg A: H-N 300, 700, N-G 002 mV peak
 - Leg B: H-N 700, 900, N-G 000 mV peak
 - · It seems possible that most of your high levels are from devices in your home
- · More testing would be needed to identify internal sources
 - Potential internal sources
 - Transmitting digital electric meter
 - · Air source heat pumps/mini splits
 - All digital devices
 - LED and compact fluorescent bulbs
 - Other
 - Potential external sources
 - Neighboring houses
 - Solar panels
 - Industry
 - Fiber internet service
 - Other
- Note: Computers and all electronic devices create DE that radiates from all connected wires

Recommendations

- Identify internal sources and remove or reduce use of them
 - · I can assist you with this in a remote consultation
- Install whole house DE filters and point-source filters as needed
 - · Requires an electrician
 - Two product recommendations



- PQ Filter as part of the EMF Safe remote cutoff switch
 - * Same as mentioned in the EF section
- Satic Shield Power Perfect
- Use a plug-in tester to measure results of the whole house filter
 - · Add greenwave or other plug in filters at outlets near point sources like computers as needed
 - · I can guide you on this process in a remote session
 - Or I can return to get more detailed measurements
- Limit your exposure and proximity to electronic devices

Electrical System

Observations

See table below for system components

Electrical System Details			
Component	Observed Description	Notes	
Electric Meter	RF Transmitting		
Meter location	On house, Left side		
Service to house	Above ground		
Powerlines on street	Above ground		
1st means of disconnect	In Main panel		
Main Panel	3 wire feed, N and G commingled, 200A		
Branch circuit cable type	NM romex type; Old black/silver NM with thin ground wire		
Age of panel, new/old	New		
Outlets grounded	Yes		
Grounding Electrode	Ground rod below meter; Water Pipe		
Water Pipe bond	Yes	Electrode? yes	
Objectionable Current on grounding conductors?	Yes	Water Bond wire 0.3 amps	
Panels wired properly?	Main: Yes; Sub: No		
Sub panels?	1		
Generator, # of circuits?	None	Brand	
Solar panels?	None		

Recommendations

- Ensure two ground rods are below the utility meters, both connected to the same cable
 - This will be your single grounding electrode
 - Required by code for lightning protection



- Move the water pipe bond wire clamp to the copper pipe after the plastic pipes of the water filter
- Consider adding a combination meter/disconnect on the outside of the house and adding two dedicated outlets for testing purposes
 - See the appendix for details

Utility Meters

Observations

- · You have a RF wireless transmitting electric meter
 - These send wireless signal pulses regularly
 - The pulses radiate out from the glass cover primarily and also couple onto the house wiring
 - · They create DE which affects the house wiring as well
 - · Yours has two FCC ID numbers, one for each frequency range used
 - Around 2.4 GHz, FCC ID: R7PEG1R2X6 Link Here
 - Around 902 904 MHz, FCC ID: R7PNG0R1S7 Link Here
- · You have a transmitting water meter, and possibly gas meter as well
 - These also send out RF signals throughout the day and night

Recommendations

- Ask your electric company about changing to an analog, spinning dial, non-transmitting meter
 - · They usually don't allow this but it's good to ask anyway
 - An Opt-Out meter may be available
 - These will typically still be digital meters and create DE, whereas a spinning dial analog meter does not
 There may be a fee for this
- Ask your water and gas companies about an opt-out meter
 May be possible
- Using shielding material or even tin foil, you can deflect the pulses away from your living space without obstructing the utility's ability to read the meters

Conclusion

It was a pleasure performing an EMF inspection of your home and providing you with this report. I hope I have served you well.

Please feel free to contact me if you have any questions or would like me to perform further testing and mitigation services. I am here to help.

Thank you, **Rex Funk** Building Biologist Electromagnetic Radiation Specialist EMRS, BBEC, BBNC

(Be sure to read the Appendix and the Background Information below)

Client

Date

Background Information - the Basics

EMF is a general term that refers to artificial Electromagnetic Fields created by modern electrical devices, and also those found in nature. Biological organisms are fundamentally electrical in nature and are therefore extremely sensitive to external electrical phenomena. Our body's intricate processes, such as basic cellular functions, are easily disrupted by the energy emitted from modern technology, whether strong or weak, high frequency or low frequency. The negative effects are cumulative and can take years to show up as health problems. Many thousands of independent peer reviewed scientific studies are available showing harm from non-ionizing electromagnetic fields, yet they are ignored by mainstream sources. However, the weight of the science is on the side of recommending avoidance, or at least, caution.

The Building Biology strategy, in order of importance, is:

- 1. Identify the sources
- 2. Eliminate things that can be eliminated
- 3. Increase distance to sources
- 4. Shield what can't be eliminated

My Motto is

"The Less, The Merrier" when it comes to artificial EMFs

The types of EMFs I measure in my inspections include AC Magnetic Fields (MF), AC Electric Fields (EF), Radio Frequency (RF), and Dirty Electricity (DE). Due to their prevalence, these four types are, in general, the most important. In most homes the strongest source of EMFs comes from the Wifi Router and Cell Phones. These emit RF regularly and the strength in close proximity is comparable to being right next to a cell tower. When devices try to connect to the data source, your overall exposure increases. Microwave ovens are also extremely strong, and all of them do leak. The radiation can be measured as far as 50 feet away.

RF reduction can best be achieved by avoidance. Removing WiFi in your home and using Ethernet cables to each point of use, such as the office, kitchen, bedroom, etc., would be the best option. You will need a wired-only router, in some cases you can disable the WiFi in your modem/router. You can purchase Ethernet adapters that enable your phones, tablets, and laptops to use the Internet without WiFi. A simple place to start is to turn off or unplug the router at night. A timer can be purchased from the hardware store to automatically turn it on and off. You can also add a landline to your internet service package. However, you should avoid cordless phones since they are just as problematic as cell phones.

You can reduce your exposure to RF from your cell phone by turning airplane mode ON when you don't need to receive calls, texts, or emails. Be sure to also turn WiFI and Bluetooth OFF when not needed. Additionally, you can read and compose emails and texts in airplane mode and then send them once airplane mode is off again. The signal is strongest while the phone is connecting to the cell tower or WiFi so you could set it down and walk away during those times. Shielding is another option, and many products are on the market for this purpose, but selection and installation must be wisely designed, guided by accurate measurements of RF and EF. Otherwise it could make you feel worse.

During sleep, your body makes melatonin to recover from the toxins encountered during the day. This is critical for overall health. EMFs can disrupt this process. When you sleep, it's best to power off your phone, or use airplane mode, or put it in another room. Using it as an alarm will still work in airplane mode. Also, the further away you are from your phone, the weaker the field is. Some say 4-8 feet is safe, but for the sensitive, that's still not enough. Whenever your have weak cellular reception the phone ramps up its power to connect to the tower. Your exposure is less when you have a better signal.







Client Date

DE is created by anything that has a circuit board and uses a switch-mode power supply to transform AC power to DC. Examples are: computers, dimmer switches, power adapters, chargers, electronic devices, and most appliances. Some create more DE than others. The "dirty" part is the high frequency voltage spikes that get created and then travel along the wires - they also radiate into your home within the electric and magnetic fields. Digital utility meters, mini-split heat pumps, and solar inverters are some of the worst offenders. Energy efficient appliances that use variable speed and variable frequency drives are also big sources. LED bulbs cause DE and so do compact fluorescents. It is best for your health to use incandescent bulbs.

Wiring errors that create high magnetic fields are commonly found in homes. These need to be identified and resolved, both for health reasons, and because they are electric code violations. Wiring errors can also put current on the grounding system which creates the additional hazard of low level contact current on metallic fixtures and pipes. Most houses are also wired with plastic jacketed cables which emit a high electric field. Metal clad cables are best because they contain the electric field fairly well.

A healthier electrical system can be created by moving the utility meter and main disconnect off of the house plus ensuring there is only one grounding point. All Neutral-Neutral and Neutral-Ground connections within the system must be separated except for the one required at the main disconnect.



The Building Biology premiss is

"Nature is the Gold Standard" when it comes to health choices

IEQ stands for Indoor Environmental Quality. Building Biology is the study of how the built environment - our home - affects our overall wellbeing, including our health and state of mind. There are many factors that contribute to our homes' ability to nurture us properly. We need to consider all of the ingredients that go into the building of our homes, as well as what we bring into our homes. Maintenance is another critical component because without it our homes will degrade and become unhealthy.

The static electric charge of the air in our homes should be more negative than positive, but synthetic materials tend to increase the positive ions. This is easily resolved by switching to natural fabrics and finishes. Letting in fresh air also helps. The Earth's static magnetic field normally rises upwards steadily but metal objects in the home such as metal bed frames and rebar can deflect it causing it to distort. Caverns, underground water flows and metal ore deposits can have the same effect, making careful building site selection even more important.

Electromagnetic Radiation comes into our homes from exterior sources which can take effort to block, but often the most EMR people are exposed to comes from the devices they install themselves. This includes Wifi, cordless phone, cell phones, microwave ovens, and a myriad of wireless devices. The building wiring also radiates electric and magnetic fields if not thoughtfully installed.

Radioactive particles are naturally present everywhere and can be concentrated in certain building materials. The radon rising from below the house should ideally be diverted away from the house. If the house doesn't have enough fresh air radon can build up inside.

Indoor temperatures can affect our well being and state of mind. At certain times of year extreme temperature differences and high humidity can cause condensation in places where mold can grow. Damp areas can also be a breeding ground for pests and bacteria.

Carbon monoxide is a byproduct of all combustion. Therefore adequate venting which is properly maintained is critical. HVAC air filters need to be high quality and changed regularly.

What chemical are under your sink? How natural is the paint on your walls? Do you clean up dust often to help keep down the particulates in the air?

A good quality whole house water filter is the best option to provide good drinking and bathing water, free of chlorine and disinfection by-products.