

Your Building Biology WA EMF Audit

An **Electrobiological (EMF)** audit involves a quantified measurement of electropollution, assessing its impact on human health and providing detailed recommendations to reduce exposure specific to your home or commercial space.

As opposed to an Environmental Scientist or Industrial Hygienist, a Building Biologist measures exposures within the built environment (such as in the home) against a set of standards that have been developed independent of industry and are both health and scientifically based. Building Biology Standards accommodate for sensitive individuals, from infants to the elderly and those in poor health, and take into consideration factors such as prolonged exposure, synergist and cumulative effects.

Your residential/commercial audit covers the 4 parameters of electropollution. The following 3 parameters mainly result from, or are a result of, the generation or use of electricity.

- **Low Frequency AC Magnetic Fields** – These fields are created as a result of current FLOWING through a conductor. The more power you are drawing, the bigger the magnetic field. A device must be plugged in and IN USE to create a magnetic field. These fields are measured in milligauss (mG) or nanotesla (nT) and can penetrate most things.
- **Low Frequency AC Electric Fields** – These fields exist due to the electrical pressure found in electrical appliances and household wiring, and are there provided power has access (leaked electrons). They exist even when the appliance is off, provided it is still plugged in and on at the switch, and extend up to around 1.2m from the source. These fields can easily reflect and refract and are measured in V/m.
- **Dirty Electricity (DE)** (also known as dirty mains, dirty power, or electrical pollution) is a term that describes the problem of electromagnetic noise on the mains wiring of a house. DE occupies a part of the spectrum in-between the power frequency fields created by powerlines and substations, and the microwaves produced by mobile phone masts and other wireless devices. This is measured in millivolts (mV) or Graham Stetzer units (GS units).

The fourth parameter, and by far the most controversial, is **Radiofrequencies (RF)**. RF are any of the electromagnetic wave frequencies that lie in the range extending from around 3 kHz to 300 GHz, which include those frequencies used for communications or radar signals. This category contains exposures from sources such as mobile phones, base stations, various communication devices, smart meters, gaming devices, computers and all other things wireless.

Each parameter is measured in a particular way, against a health-based standard for that type of exposure, and carries with it its own health concerns, unique to the way it interacts with the human body and environment. Each parameter is remedied separate from another.

The purpose of the audit is to identify and measure sources, and possible sources, of EMF and RF exposure, discussion of associated health concerns and detailed remediation recommendations.

What to Expect

After your initial phone or email conversation, you will receive a set of questionnaires, to be completed and returned within 3 days of the audit. From the questionnaires, the Building Biologist will assess your current health concerns, behaviour in relation to technology and the build itself.

Prior to the audit, the Building Biologist will also gather background information on the area and surrounds, such as the placement of cell towers and other impacting infrastructure, as well as a brief assessment of other environmental factors that may amplify the effects of electropollution, such as high ambient heavy metal exposure.

On the day of your audit, your Building Biologist will arrive at the agreed time. There will be time, at the beginning of the audit, to discuss any questions you may have had in regard to the questionnaire, as well as any other relevant concerns.

The onsite component of the audit will take approximately 3-4 hours, depending on the level of technology used, the build itself and impacting external factors.

After the audit, the Building Biologist may provide some feedback and suggested practices or recommendations to start with in the interim, before your formal report is received.

Your invoice will be issued post completion of your audit and requires payment prior to the release of the report.

Your (standard) report will be provided within 10-14 *business* days of your onsite assessment. Your report will detail exposures, associated health concerns of those exposures, our recommendations and (if required) a remediation guide, as well as a link to the photographs and our notes that are taken onsite. (A formal, more comprehensive report can be prepared, on request. Please note that additional charges apply for a formal report and requests need to be made prior to the audit commencing.)

Your report will also cover information on topics such as safe distances and practices for the use of electric devices, solutions for shielding (if required) and an understanding of how to reduce screen time exposure for young children.

Building Biology WA wish to make sure that you fully understand the contents of your report and how to implement the recommendations suggested, to create a safe space for you and your family. For this reason, we encourage clients to email us their queries once they have read their report, if there is anything they don't understand.

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BUT TO TAKE AWAY FACTORS/TOXICANTS THAT BURDEN THE BODY.***