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**United States District Court** 

## **District of Oregon**

### **Portland Division**

AHM, by and through her Guardian *ad litem* and father, David Mark Morrison, and David Mark Morrison, individually, Civil Action No. 3:11-cv-00739-MO

Declaration of Dr. Magda Havas, B.Sc., Ph.D. Addendum C – International Appeals

Portland Public Schools,

v.

Defendant.

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#### Addendum C

Appeals, resolutions that scientists have signed around the world. I'm sending you some of these here to include in the appropriate section. They are also available on my website:

# INTERNATIONAL EXPERTS' PERSPECTIVE ON THE HEALTH EFFECTS OF ELECTROMAGNETIC FIELDS (EMF) AND ELECTROMAGNETIC RADIATION (EMR).

June 11, 2011. Below are some of the key resolutions/appeals released by expert scientific groups around the world since 1998, regarding the biological and health effects of both low frequency electromagnetic fields (EMF) associated with electricity and radio frequency (RF) electromagnetic radiation (EMR) generated by wireless devices.

Anyone who reads these cannot be left with the illusion (or delusion) that this form of energy is without adverse biological and health consequences at levels well below existing guidelines. Children are particularly vulnerable. It is irresponsible of governments to maintain the status quo in light of thousands of studies that have been published and statements by these experts.

Here are the resolutions/appeals/reports in reverse chronological order:

16. May 31, 2011: International Agency for Research on Cancer (IARC) and World Health Organization (WHO) reclassified radio frequency electromagnetic fields as a Class 2B carcinogen (possibly carcinogen to humans). This applies to all forms of radio frequency radiation (and not just cell phones as some inaccurately claim). Click here for press release. Final report will be published in the July 1<sup>st</sup> issue of The Lancet Oncology.

15. May 2011: The Parliamentary Assembly Council of Europe (PACE) released Resolution 1815 on the *Potential Dangers of Electromagnetic Fields and their effect on the Environment.* This document has some excellent recommendations regarding cell phones, cordless phones, wireless baby monitors, WiFi, WLAN, WiMax, power lines, relay antenna base stations; with special concerns expressed for the protection of children and those who are electrosensitive. Click here for document.

14. May 2011: Multiple Chemical Sensitivity (MCS) and Electrohypersensitivity (EHS), Summary of meeting at the WHO headquarters Geneva, May 13, 2011. Click here for report. Some statements from this meeting are quoted below:

We need to include these illnesses [MCS and EHS] in the WHO International Classification of Diseases (ICD), because what makes it more difficult for legal recognition is precisely the lack of code for these diseases in the ICD.

The adverse reactions to chemicals or electromagnetic radiation vary in duration according to each patient, and the manifestations differ too. When the patient is again exposed, symptoms usually worsen or result in the appearance of new symptoms.

The process of these diseases (MCS and EHS) is chronic and the patient's situation is exacerbated if he/she lives in a toxic environment, such as near Tarragona petrochemical industry or subjected to electromagnetic radiation: emissions in the neighborhood, mobile phone antennas, etc, The patient has to avoid re-exposure.

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We are facing very high numbers of people already diagnosed ... between 12% and 15% of the population has some kind of disturbance in the presence of a chemical substance. In the EHS, figures of affected people are between 3 and 6% of the population, but these numbers are growing continuously.

Each country can recognize these diseases and include them in their ICE, independently of WHO, since according to the WHO countries have sovereignty on this issue.

13. April 2011: The Russian National Committee on Non-Ionizing Radiation Protection (RNCNIRP) released their Resolution entitled "Electromagnetic fields from Mobile Phones: Health Effect on Children and Teenagers". Click here for report. The Committee presents some startling statistics [references provided in original document].

In April 2008, the RNCNIRP reviewed the short-term and long-term effects of mobile phone use for children. In particular, it reviewed possible decrease of intellectual abilities and cognition together with possible increases in susceptibility to epileptic fits, "acquired dementia" and degeneration of cerebral nervous structures. The results of clinical studies have shown that chronic exposure to RF EMF may lead to borderline psychosomatic disorders. In 2010, a number of papers published in Russian and foreign peer-reviewed journals showed a response to RF EMF exposure from the immune system.

... since 2000 there has been a steady growth in the incidence of childhood diseases identified by RNCNIRP as "possible diseases" from mobile phone use. Of particular concern is the morbidity increase among young people aged 15 to 19 years (it is very likely that most of them are mobile phone users for a long period of time). Compared to 2009, the number of CNS [central nervous system] disorders among 15 to 17 yearold has grown by 85%, the number of individuals with epilepsy or epileptic syndrome has grown by 36%, the number of "mental retardation" cases has grown by 11%, and the number of blood disorders and immune status disorders has grown by 82%. In group of children aged less than 14 years there was a 64% growth in the number of blood disorders and immune status disorders, and 58% growth in nervous disorders. The number of patients aged 15 to 17 years old having consultations and treatment due to CNS disorders has grown by 72%.

Because of this the RNCNIRP considers it important to conduct a scientific study to determine whether the growth in morbidity resulted from EMF exposure from mobile phone use or whether it was caused by other factors.

12. 2010: Seletun Statement, Norway: The International Electromagnetic Field Alliance (IEMFA) released their report entitled *Scientific* Panel on Electromagnetic Field Health Risks: Consensus Points, Recommendations, and Rationales following a scientific meeting at Seletun Norway November 2009. The summary/abstract is provided below. Click here for publication. Click here for report and short video of Dr. Olle Johansson.

Summary: In November, 2009, a scientific panel met in Seletun, Norway, for three days of intensive discussion on existing scientific evidence and public health implications of the unprecedented global exposures to artificial electromagnetic fields (EMF). EMF exposures (static to 300 GHz) result from the use of electric power and from wireless telecommunications technologies for voice and data transmission, energy, security, military and radar use in weather and transportation. The Scientific Panel recognizes that the body of evidence on EMF requires a new approach to protection of public health; the growth and development of the fetus, and of children; and argues for strong preventative actions. New, biologically-based public exposure standards are urgently needed to protect public health worldwide.

Conclusions in this report build upon prior scientific and public health reports and resolutions documenting the following consensus points:

a) Low-intensity (non-thermal) bioeffects and adverse health effects are demonstrated at levels significantly below existing exposure standards.
 b) ICNIRP and IEEE/FCC public safety limits are inadequate and obsolete with respect to prolonged, low-intensity exposures.
 c) New, biologically-based public exposure standards are urgently needed to protect public health world-wide.

d) It is not in the public interest to wait.

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11. 2009: EU Parliament Electromagnetic Report and Resolutionentitled: European Parliament Resolution on health concerns associated with electromagnetic fields, was adopted February 17, 2009 with 29 recommendations. Click here for report.

10. 2009: Porto Alegre Resolution, Brazil. Scientists and doctors recognize electrohypersensitivity and are concerned that exposure to electromagnetic fields may increase the risk of cancer and chronic diseases; that exposure levels established by international agencies (IEEE, ICNIRP, ICES) are obsolete; and that wireless technology places at risk the health of children, teens, pregnant women and others who are vulnerable. Click herefor document.

9. 2008: Venice Resolution, Italy. International Commission for Electromagnetic Safety (ICEMS) Scientists recognize biological effects at non-thermal levels, that standards are inadequate, that electro-sensitivity exists and that there is a need to research mechanisms. Click here for Venice Resolution.

Three key statements are provided below:

We take exception to the claim of the wireless communication industry that there is no credible scientific evidence to conclude there a risk. Recent epidemiological evidence is stronger than before, which is a further reason to justify precautions be taken to lower exposure standards in accordance with the Precautionary Principle.

We recognize the growing public health problem known as electrohypersensitivity; that this adverse health condition can be quite disabling; and, that this condition requires further urgent investigation and recognition.

We strongly advise limited use of cell phones, and other similar devices, by young children and teenagers, and we call upon governments to apply the Precautionary Principle as an interim measure while more biologically relevant standards are developed to protect against, not only the absorption of electromagnetic energy by the head, but also adverse effects of the signals on biochemistry, physiology and electrical biorhythms. 8. 2007: BioInitiative Report, USA. In response to statements that there are no scientific studies showing adverse biological effects of low level electromagnetic fields and radio frequency radiation, a group of researchers produced the BioInitiative Report that documents 2000 studies showing biological effects of extremely low frequency (ELF) electromagnetic fields and radio frequency (RF) radiation and calling for biologically based exposure guidelines. This document was criticized for not having been peer-reviewed even though most of the studies cited in this document were peer-reviewed. Click here for pdf.

Since then some of the BioInitiative papers as well as ones by other authors have appeared in a special issue of the peer-reviewd journal Pathophysiology(Volume 16 Issues 2-3, 2009). The papers in this journal document EMF effects on DNA, EMF effects on the brain, EMF in the environment, and science as a guide to public policy. Click here for abstracts.

7. 2006: Benevento Resolution, Italy. The International Commission for Electromagnetic Safety (ICEMS) organized a conference entitled: *The Precautionary EMF Approach: Rationale, Legislation and Implementation*. Scientists at this conference signed the Benevento Resolution (click here for pdf) that consists of 7 major statements. Among those statements are the following:

1. ... there are adverse health effects from occupational and public exposures to electric, magnetic and electromagnetic fields, or EMF, at current exposure levels. What is needed, but not yet realized, is a comprehensive, independent and transparent examination of the evidence pointing to this emerging, potential public health issue.

4. Arguments that weak (low intensity) EMF cannot affect biological systems do not represent the current spectrum of scientific opinion.
6. We encourage governments to adopt a framework of guidelines for public and occupational EMF exposure that reflect the Precautionary Principle- as some nations have already done.

7. 2005: Helsinki Appeal, Finland. Physicians and researchers presented the Helsinki Appeal to the European Parliament. Click here for document. They state that:

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The present safety standards of ICNIRP (International Commission of Non-Ionizing Radiation Protection) do not recognize the biological effects caused by non-ionizing radiation except those induced by the thermal effect. In the light of recent scientific information, the standards recommended by ICNIRP have become obsolete and should be rejected. Especially children and other persons at risk should be taken into account when re-evaluating the limits regarding the harmful effects of electromagnetic fields and radiation. Call for new safety standards, reject International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines.

6. 2005: Irish Doctors' Environmental Association (IDEA), Ireland.Members of IDEA wrote a position paper on electromagnetic radiation. Doctors recognize electrohypersensitivity (EHS) is increasing and request advice from government on how to treat EHS. Click here for document. Below is a quote from this document.

The Irish Doctors' Environmental Association believes that the Irish Government should urgently review the information currently available internationally on the topic of the thermal and non-thermal effects of exposure to electro-magnetic radiation with a view to immediately initiating appropriate research into the adverse health effects of exposure to all forms of non-ionising radiation in this country, and into the forms of treatment available elsewhere. Before the results of this research are available, an epidemiological database should be initiated of individuals suffering from symptoms thought to be related to exposure to non-ionising radiation. Those claiming to be suffering from the effects of exposure to electro-magnetic radiation should have their claims investigated in a sensitive and thorough way, and appropriate treatment provided by the State.

The strictest possible safety regulations should be established for the installation of masts and transmitters, and for the acceptable levels of potential exposure of individuals to electro-magnetic radiation.

5. 2002. Catania Resolution, Italy. This resolution was signed by scientists at the international conference "State of the Research on Electromagnetic Fields-Scientific and Legal Issues". Click here for resolution. Three of their statements are provided below:

1. Epidemiological and in vivo and in vitro experimental evidence demonstrates the existence of electromagnetic field (EMF) induced effects, some of which can be adverse to health.

4. The weight of evidence calls for preventive strategies based on the precautionary principle. At times the precautionary principle may involve prudent avoidance and prudent use.

5. We are aware that there are gaps in knowledge on biological and physical effects, and health risks related to EMF, which require additional independent research.

**4. 2002 : Freiburg Appeal, Germany.** Physicians request tougher guidelines for radio frequency exposure. This document was endorsed by thousands of healthcare practitioners. Click here for pdf. Below is a quote from this report.

We have observed, in recent years, a dramatic rise in severe and chronic diseases among our patients, especially:

· Learning, concentration, and behavioural disorders (e.g. attention deficit disorder, ADD)

· Extreme fluctuations in blood pressure, ever harder to influence with medications

· Heart rhythm disorders

· Heart attacks and strokes among an increasingly younger population

· Brain-degenerative diseases (e.g. Alzheimer-s) and epilepsy

· Cancerous afflictions: leukemia, brain tumors

Moreover, we have observed an ever-increasing occurrence of various disorders, often misdiagnosed in patients as psychosomatic:

· Headaches, migraines

 $\cdot$  Chronic exhaustion

Inner agitation

· Sleeplessness, daytime sleepiness

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Tinnitus

· Susceptibility to infection

· Nervous and connective tissue pains, for which the usual causes do not explain even the most conspicuous symptoms

Since the living environment and lifestyles of our patients are familiar to us, we can see especially after carefully-directed inquiry a clear

temporal and spatial correlation between the appearance of disease and exposure to pulsed high -frequency microwave radiation (HFMR), such as:

· Installation of a mobile telephone sending station in the near vicinity

· Intensive mobile telephone use

· Installation of a digital cordless (DECT) telephone at home or in the neighbourhood

We can no longer believe this to be purely coincidence, for:

Too often do we observe a marked concentration of particular illnesses in correspondingly HFMR-polluted areas or apartments;

• Too often does a long-term disease or affliction improve or disappear in a relatively short time after reduction or elimination of HFMR pollution in the patient's environment;

· Too often are our observations confirmed by on-site measurements of HFMR of unusual intensity.

**3. 2002:** Salzburg Resolution, Austria. The Salzburg Resolution on Mobile Telecommunication Base Stations makes four recommendations including preliminary guidelines of 0.1 microW/cm2 for sum of all emissions from mobile phone stations. This is well below the current ICNIRP guidelines and those in Canada and the US (1000 microW/cm2) and is slightly lower than guidelines in Switzerland, Italy, Russia, China (10 mciroW/cm2). Click herefor document.

2. 2000: Stewart Report, UK. The Independent Expert Group on Mobile Phones (IEGMP) produced a report, *Mobile Phones and Health*, that is commonly referred to as the Stewart Report, named after its Chairman Sir William Stewart. Click here for pdf. A quote from the foreward shows how much our understanding of this issue has changed since 2000.

The report points out that the balance of evidence does not suggest mobile phone technologies put the health of the general population of the UK at risk. There is some preliminary evidence that outputs from mobile phone technologies may cause, in some cases, subtle biological effects, although, importantly, these do not necessarily mean that health is affected. There is also evidence that in some cases people's well-being may be adversely affected by the insensitive siting of base stations. New mechanisms need to be set in place to prevent that happening. The report goes on to state that:

1.17. The balance of evidence to date suggests that exposures to RF radiation below NRPB and ICNIRP guidelines do not cause adverse health effects to the general population.

1.18 There is now scientific evidence, however, which suggests that there may be biological effects occurring at exposures below these guidelines...

1.19 ... We conclude therefore that it is not possible at present to say that exposure to RF radiation, even at levels below national guidelines, is totally without potential adverse health effects, and that the gaps in knowledge are sufficient to justify a precautionary approach.

1.20 In the light of the above considerations we recommend that a precautionary approach to the use of mobile phone technologies be adopted until much more detailed and scientifically robust information on any health effects becomes available.

1. 1998: Vienna EMF Resolution, Austria. At a Workshop on Possible Biological and Health Effects of RF Electromagnetic Fields, the scientists agreed on the following:

The participants agreed that biological effects from low-intensity exposures are scientifically established. However, the current state of scientific consensus is inadequate to derive reliable exposure standards. The existing evidence demands an increase in the research efforts on the possible health impact and on an adequate exposure and dose asses.

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#### Base stations: How could satisfactory Public Participation be ensured?

The public should be given timely participation in the process. This should include information on technical and exposure data as well as information on the status of the health debate. Public participation in the decision (limits, siting, etc.) should be enabled. Cellular phones: How could the situation of the users be improved?

Technical data should be made available to the users to allow comparison with respect to EMF-exposure. In order to promote prudent usage, sufficient information on the health debate should be provided. This procedure should offer opportunities for the users to manage reduction in EMF-exposure. In addition, this process could stimulate further developmentlow-intensity emission devices Regarding legal aspects . . .

there is protection deficit in the public and private laws which is unsatisfactory. The legislator is requested to solve the conflict of interests between the industries commission on one side and the neighbours involvement and their interests on protection of life and health on the other side. Because of the constitutionally determined objectives of the state to comprehensively protect the environment, there is a demand of acting precautionary on the political and legal level.

The Vienna declaration on electromagnetic fields recommended 13 detailed action items for parliament to consider. Click here to read those items and to download pdf.

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Based on these resolutions and appeals from international groups of physicians and scientists immediate action is required to protect public health from continued increasing exposure to radio frequency radiation and electromagnetic fields.

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