

**IN THE COURT OF APPEALS
OF THE STATE OF NEW MEXICO**

No. 32,549

ARTHUR FIRSTENBERG,

Plaintiff-Appellant/Cross-Appellee,

v.

RAPHAELA MONRIBOT,

Defendant-Appellee/Cross-Appellant.

On appeal from the First Judicial District Court, Division II,
County of Santa Fe, State of New Mexico,
The Hon. Sarah M. Singleton, Case No. D-101-CV-2010-29

BRIEF OF AMICI CURIAE IN SUPPORT OF APPELLANT

Dafna Tachover
2045 CR-23C
East Jewett, NY 12424
(518) 734-5628
Attorney for Amici Curiae

Stefanie Beninato
PO Box 1601
Santa Fe, NM 87504
(505) 988-8022
local counsel

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Statement of Compliance

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IDENTIFICATION OF *AMICI CURIAE*

United States

CENTER FOR ELECTROSMOG PREVENTION is a 501(c)(3) nonprofit organization in California whose mission is the prevention and reduction of electromagnetic pollution.

CENTER FOR SAFER WIRELESS is a 501(c)(3) nonprofit organization based in Haymarket, Virginia. Its mission is to educate parents, children, health providers, educators, and governments about the risks and safer use of wireless technology.

CITIZENS FOR A RADIATION FREE COMMUNITY is “citizens from all walks of life with one common denominator – we wish to live in a world, free from involuntary exposure to debilitating and deadly microwave radiation as emitted from cell towers, smart meters, Wi-Fi and other involuntary radiation sources.” The Los Angeles-based organization gives lectures to communities and testifies for governmental bodies.

CLEAR LIGHT VENTURES is a social venture firm in Los Altos Hills, California whose primary mission is the reduction in environmental health threats to improve human health and performance.

COALITION FOR HEALTH AGAINST SMART METERS, based in Florida, seeks immediate local, state, and national moratoria on the deployment of wireless meters and their infrastructures.

DEFENDERS OF THE BLACK HILLS is an all volunteer organization without racial or tribal boundaries, whose purpose is to preserve, protect, and restore the environment of the 1851 and 1868 Treaty territories made between the United States and the Great Sioux Nation. Defenders is a 501(c)(3) non-profit organization and began its work in August, 2002. It is run by a Board of Directors and is incorporated in the state of South Dakota.

EMF REFUGEE: INTERNATIONAL COALITION FOR AN ELECTROMAGNETIC SAFE PLANET is an educational and support organization, presently based in California, and a web-based forum, for people with EHS.

EMR ACTION DAY was founded in 2012 by concerned and affected people in North America, South America, Europe and Africa to raise awareness every year on Earth Day of the environmental effects of electromagnetic pollution. It

proposes new choices for safer energy consumption and advocates for radiation-free zones.

EVERGREEN CENTER is a medical center in Oregon City, Oregon, dedicated to research, education and treatment for people with autism.

HEALING EARTH & EMF REFUGE is an informal organization, founded in 2013 and based in Cambridge, Massachusetts. It is dedicated to creating safe refuges for people and ecosystems, with respect to climate change and new technologies.

GLOBAL RADIO FREQUENCY RADIATION DEFENSE TEAM, based in Massachusetts, was founded in 2008. It is dedicated to bringing public awareness to the harm the automated metering infrastructure is doing to humans and wildlife.

LUBBOCK AGAINST SMART METERS was organized to prevent the rollout of smart meters in Lubbock, Texas.

MAINE COALITION TO STOP SMART METERS successfully instigated the first ever in-depth investigation by the Maine Public Utilities Commission into the health and safety impacts of smart meters.

MARYLAND SMART METER AWARENESS is a 1,000-member advocacy organization in the state of Maryland dedicated to educating the public about the dangers of smart meters.

NAPERVILLE SMART METER AWARENESS is a 501(c)(4) nonprofit, organized in Naperville, Illinois to raise awareness of the potential issues of and advocate for informed consent and choice in the installation of “Smart” meters.

PEOPLE AGAINST CELL TOWERS AT SCHOOL, founded in 2008 in Tampa, Florida, is a group of citizens who stand for the principle that it is unethical, unreasonable and reckless for school districts to lease school property to cell tower providers. They also oppose Wi-Fi and all other wireless devices in schools.

SEDONA SMART METER AWARENESS, founded in 2010, is a grassroots organization of residents of Sedona focused on the health, privacy, security and safety issues associated with the use of electromagnetic and microwave radio frequencies.

STOP SMART METERS is a California based organization that has been fighting the deployment of smart meters since 2010. It has received written testimony from

over 2,000 people reporting adverse health effects from smart meters and related infrastructure.

STOP SMART METERS GEORGIA works to warn people of the dangers of smart meters.

STOP SMART METERS NY is a New York State based community action group working to educating the public, elected officials and government agencies about the health, privacy, fire and cyber security risks associated with smart meters

TEXANS AGAINST SMART METERS was organized to demand a moratorium on smart meter rollout in Texas.

WAVE ANALYSIS VERIFICATION RESEARCH is a 501(c)(3) nonprofit, based in Green Bank, West Virginia, that is building the first radiation-free refuge for people with EHS in the U.S.

WIRELESS EDUCATION ACTION is a 501(c)(3) nonprofit organization based in Portland, Oregon, that seeks to further public knowledge of the biological hazards of wireless technology, especially to children.

European Union

EMF WORKING GROUP of the EUROPEAN ACADEMY FOR ENVIRONMENTAL MEDICINE (EUROPAEM). EUROPAEM is an organization of European doctors who specialize in the treatment of diseases caused by environmental pollution. The EMF WORKING GROUP is leading the organization's policy on the health effects of EMFs, including EHS.

Australia

AUSTRALIAN CHEMICAL TRAUMA ALLIANCE is an organization supporting people who are sensitive to chemicals and very often electromagnetic radiation. It offers counseling, advice, referrals to appropriate medical and legal practitioners, and introductions to other members for mutual support.

ES.OZ is an educational organization focused on electromagnetic radiation and a support organization for people with EHS in Australia.

OREAD PROJECT, formed in 2013, is an action group based in a community in the sensitive subtropical rainforest of north New South Wales, Australia. The project's purpose is to educate the public and create radiation-free areas in the region to protect humans and wildlife.

STOP SMART METERS AUSTRALIA, INC. is an Australian advocacy and educational organization, which was incorporated in 2013 to support and assist people who have suffered devastating health effects as a result of pulsed radiofrequencies from smart meters.

Canada

CANADIANS FOR SAFE TECHNOLOGY (C4ST) is a not-for-profit, volunteer-based coalition of parents, citizens and experts whose mission is to educate and inform Canadians and their policy makers about the dangers of electromagnetic radiation from technology. One of their key focus areas is raising awareness of EHS. Part of their requests of the government in Canada is recognition that EHS exists. The CEO of C4ST is Frank Clegg, formerly President of Microsoft Canada.

CITIZENS FOR SAFE TECHNOLOGY represents over 30,000 individuals in British Columbia. It is a nonprofit society incorporated in 2007 that provides information to the general public on the health effects of radiation from wireless technology.

COALITION TO STOP SMART METERS is a non-partisan coalition established in 2010 in British Columbia consisting of residents, businesses and organizations dedicated to ensuring that the upgrading of the provincial utility infrastructure (electric, water, gas) proceeds in a manner that protects jobs, democracy, privacy, security, safety, rights, health and the environment.

KAWARTHA SAFE TECHNOLOGY INITIATIVE is a citizens group based in Peterborough, Ontario, Canada focused on removing Wi-Fi from schools.

LAKESHORE COALITION is group of concerned residents of Grand Bend, Port Franks, Ipperwash and Kettle Point, Canada whose focus is educating the public concerning the health and environmental risks associated with telecommunications towers and radio frequency radiation. It advocates for the establishment of radiation-free refuges for people with EHS.

WEEP Initiative is a Canadian initiative to stop wireless, electric and electromagnetic pollution founded in 2005.

Colombia

ESCUELA DE AUTOINDAGACIÓN (“School of Self-Inquiry”) was founded in 1998 in Colombia to promote integrative methods of education that lead to healthier societies.

Denmark

EHS FORENINGEN (EHS Association of Denmark) is an information and support organization for people with EHS, founded in 1992.

MAST-VICTIMS.ORG is a web forum begun in 2003 and based in Denmark and the UK. Its purpose is solely to warn others of the devastating health effects of wireless technology. Since 2005 the website has had 10,797,607 visits and users.

RÅDET FOR HELBREDSSIKKER (Danish Council for Safe Telecommunication) is a non-profit, non-governmental organization founded in 2010. Its primary goal is to provide evidence-based information to the public about the adverse health effects caused by exposure to wireless communication technologies.

Faroe Islands

ERBYLGJUFELAGIÐ (“Microwave Association”) was founded in 2011 to stop the proliferation of cell phone towers in the Torshavn Municipality, Faroe Islands, and to work to eliminate wireless technology from schools, workplaces, and public places.

Finland

SÄHKÖHERKÄT RY is a patients’ organization for people with EHS in Finland.

France

ELECTRICSENSE is web-based and operated from France by Lloyd Burrell. It provides information and support worldwide to people with EHS on how to minimize exposure to electromagnetic fields.

NEXT-UP is a French NGO created in 2005 to inform and warn the public and protect the natural environment from electromagnetic pollution. Next-Up has created the first radiation-free refuge in Europe for people with EHS.

ROBIN DES TOITS is a French NGO whose object is to warn against health hazards caused by wireless technologies. It was the first NGO in France to care about EHS and to go public with that major health problem in 2008. Both Next-Up

and Robin des Toits were involved in writing Resolution 1815, adopted by the Council of Europe, calling for the establishment of radiation-free zones.

Germany

ÄRZTEINITIATIVE BAMBERGER APPELL is a large group of physicians in Bavaria working since 2004 to stop the expansion of wireless infrastructure, and advocating for the establishment of radiation-free zones for people with EHS. In 2004 it published a letter on behalf of 130 doctors demanding a halt to the proliferation of wireless technology because of proven health risks.

BÜRGER GEGEN ELEKTROSMOG E.V. (Citizens against Electromog) is an educational organization founded in 2004 in Nuremberg, Germany focusing on the biological effects of electromagnetic radiation. It keeps a voluntary registry of people who have been injured by radio frequency radiation.

BÜRGERWELLE E.V., DACHVERBAND DER BÜRGER UND INITIATIVEN ZUM SCHUTZ VOR ELEKTROSMOG (“Umbrella Organization of Citizens and Initiatives to Protect Against Electromog”) is a registered nonprofit organization founded in 1997 in Germany with the aim of protecting people from electromagnetic pollution, caused primarily by wireless communications. *It also has branches in Switzerland, Italy and Austria.*

GRUPPE STRAHLEN-ENTLASTUNG (“Radiation Relief Group”), founded in 2006 in the German state of Baden-Württemberg, is a group of concerned citizens and sufferers of EHS that advises government officials and supplies information to schools about the safe use of wireless technology.

STRAHLENFREIER AMMERGAU (“Radiation-free Ammergau”) is a citizens’ initiative organized in 2001. Its members include a physician, a building biologist, three electrical engineers, a nurse, members of municipal councils, and ordinary citizens, including numerous people with EHS, who are working to reduce radiation and eliminate cell towers from Ammergau, a popular tourist region in southern Bavaria.

VEREIN FÜR ELEKTROSENSIBLE UND MOBILFUNKGESCHÄDIGTE E.V. (The Association of Electrosensitives in Munich) was founded in 1992. It is an informational and support organization for people with EHS.

India

CITIZENS RESOURCE AND ACTION INITIATIVE, in Gujarat state, India, works in the spheres of public good, universal justice and health.

CUFFE PARADE RESIDENTS ASSOCIATION is the residents association of a prominent area of Mumbai, India, with over 4,500 members and speaking for over 25,000 residents. Other residents associations in Mumbai who are joining this brief are:

ACTION AGAINST CELL TOWERS, BANDRA

BANDRA WEST RESIDENTS ASSOCIATION

BHULABHAI DESAI ROAD RESIDENTS

CARMICHAEL ROAD RESIDENTS ASSOCIATION

DADAR PARSİ COLONY

FORUM AGAINST CELL TOWERS, DADAR

INDIANS FOR SAFE ENVIRONMENTS

MALABAR HILL RESIDENTS ASSOCIATION

MATUNGA RESIDENTS GROUP

NEPEAN SEA ROAD CITIZENS FORUM

PEDDER ROAD RESIDENTS ASSOCIATION

SANTACRUZ RESIDENTS GROUP

SION RESIDENTS GROUP

V CITIZENS' ACTION NETWORK

WADALA RESIDENTS GROUP

All the Mumbai residents associations are focused on the unregulated installation of cell towers in India that are making people sick.

Ireland

IRISH DOCTORS ENVIRONMENTAL ASSOCIATION is a charitable organization of doctors in Ireland, founded in 1998 for the purpose of raising awareness about electromagnetic radiation and other environmental problems.

IRISH ELECTROMAGNETIC RADIATION VICTIMS NETWORK is a support and information group founded in 1999 to support people with EHS. It works with the Irish Doctors Environmental Association.

PARENTS FOR SAFE TECH IRELAND is an organization of parents formed to educate the public about the danger to children's health from microwave radiation from wireless technology.

Israel

NO RADIATION FOR YOU (NoRad4u) is Israeli based and headed by Amir Borenstein, a computer and electronics engineer. It operates the primary web-based resource in Israel on EHS and the health effects of electromagnetic fields.

Italy

ASSOCIAZIONE PER LE MALATTIE DA INTOSSICAZIONE CRONICA E/O AMBIENTALE (“Association for Illness from Chronic and/or Environmental Toxicity”) is a Rome-based NGO that works in Europe for the research and information about the environmental causes of diseases as well as for the political recognition of the rights of people with environmental illnesses, particular Multiple Chemical Sensitivity and EHS.

RETE NO ELETTRISMOG ITALIA (“No Electrosmog Network of Italy”) is a network of national and local organizations in Italy. Its aims are: to deliver free information to members and social networks on the problem of electrosmog; to urge the European Parliament to enact lower exposure limits for electromagnetic radiation; and to improve access for people with EHS to public buildings, hospitals, schools, etc.

Japan

LIFE-ENVIRONMENT NETWORK is a self-help group for people with EHS and Multiple Chemical Sensitivity (which are recognized as diseases in Japan). It is involved in advocacy and promoting research on EHS.

MEETING ON EMF AND OTHER ENVIRONMENTAL ISSUES OF THE KANSAI REGION is an educational and support organization for people with EHS and Multiple Chemical Sensitivity in the Kansai region of Japan.

Namibia

RADIATION AWARENESS NAMIBIA is a citizens' initiative in Namibia working for the precautionary siting of masts & antennas away from homes & schools, and the safer use of cell phones & wireless technology.

Netherlands

STICHTING EHS (EHS Foundation) is a Dutch foundation that acts as an independent center of expertise about electrosensitivity. They collect reports from people with EHS, perform measurements of their exposure levels, and apply scientifically sound field reduction materials and methods.

New Zealand

ESNZ TRUST is an independent private trust formed in 2012 to raise awareness of EHS in New Zealand. ESNZ Trust is seeking formal recognition of EHS in New Zealand, and has prepared a report to the New Zealand Human Rights Commission seeking recognition of EHS as a disability.

SAFER WIRELESS TECHNOLOGY NZ, INC. is a New Zealand organization focused on the health effects of Wi-Fi in schools, libraries, and public places, as well as cell towers.

Norway

FOLKETS STRÅLEVERN (“Citizens’ Radiation Protection”) is a Norwegian NGO that provides education about EHS, support for people with EHS, and advocacy for lower radiation levels.

Spain

ASOCIACIÓN INDIA (INICIATIVA NADIE MÁS DAÑADO POR IRRADIACIÓN DE ANTENAS) (“No More Damage to Anyone by Antenna Radiation”) works against the indiscriminate building of mobile phone antennas in urban centers and residential zones in Spain.

ASSOCIACIÓ ENSALUT, incorporated in June 2012, is an association of citizens in the Catalán region of Spain whose focus is the prevention of environmental conditions that affect health. It is developing a proposal for the Catalán Parliament to reduce the legal limits of exposure to electromagnetic radiation and address the deployment of smart meters.

AVAATE - ASOCIACIÓN VALLISOLETANA DE AFECTADOS POR LAS ANTENAS DE TELECOMUNICACIONES (“Valladolid Association of those Affected by Telecommunications Antennas”) provides information about the health risks of electromagnetic fields and support for people with EHS. Founded in 1999, it is a registered association in the autonomous region of Castilla y León, Spain.

DOMOSALUD ASOCIACIÓN CIUDADANA POR LA SALUD AMBIENTAL (“Domosalud Citizens’ Association for Environmental Health”) is established in Barcelona, Spain, to defend environmental health, including the defense of people with EHS. They are experts in environmental health, doctors, architects, physicists, pharmacists, biologists, and other specialists in various environmental disciplines.

ELECTROSENSIBLES POR EL DERECHO A LA SALUD (“Electrosensitives for the Right to Health”) is a national environmental organization, based in Madrid, Spain, that was founded in 2012 for the purpose of securing basic human rights for people with EHS.

FUNDACIÓN VIVO SANO is a registered foundation organized in 2011 in Madrid, Spain. It is an independent, private-initiative health organization. One of their major areas of work is raising public awareness about the health risks of electromagnetic fields.

LA COORDINADORA DE LA PLATAFORMA ESTATAL CONTRA LA CONTAMINACIÓN ELECTROMAGNÉTICA (PECCEM) (“National Platform Against Electromagnetic Contamination”) represents more than 90 associations in Spain. They include neighborhood associations, ecological groups, associations of people with EHS, scientific committees, experts in electromagnetic radiation, and lawyers.

Sweden

ELÖVERKÄNSLIGAS RIKSFÖRBUND (Swedish Association for the Electrohypersensitive), founded in 1987, is a national organization in Sweden for people with EHS, with over 3,000 members. It is a member of the Swedish Disability Federation. EHS is an officially recognized disability in Sweden.

VÅGBRYTAREN is an independent nonprofit association in Sweden working with the aim of reducing electromagnetic radiation to levels that do not cause harm to health or environment.

Switzerland

ASSOCIATION ROMANDE ALERTE AUX ONDES ÉLECTROMAGNÉTIQUES (“French-Swiss Association Alert to Electromagnetic Fields”) is a nonprofit informational organization and a support organization for people with EHS. Their website has had over 1,650,000 visitors.

GIGAHERZ – SCHWEIZERISCHE INTERESSENGEMEINSCHAFT ELEKTROSMOG-BETROFFENER (“Swiss Interest Group for the Electrosmog-Affected”) is a Swiss initiative against electromagnetic radiation that had its origin in protests against the Short Wave Transmitter at Schwarzenburg, which caused health problems in the surrounding area from 1971 until it was permanently removed in 1998. The group is now focused on securing the rights of people harmed by wireless technology.

United Kingdom

ELECTROSENSITIVITY UK (ES-UK) is a charity organization in the UK founded in 2003 that runs a helpline and a website, provides printed and digital information about EHS, sponsors meetings, sends out a quarterly newsletter, and engages with the medical profession and government officials.

FOODS MATTER is one of the UK’s largest web resources for allergy and intolerance and the many health conditions that relate to them.

MCS-AWARE is the UK charity for environmental illness. It provides information and support to people affected by chemical, food and electrosensitivities.

RADIATION RESEARCH TRUST is a charitable organization in the UK whose mission is to provide the facts about electromagnetic radiation and health to the public, the media, and the government.

INTEREST OF *AMICI CURIAE*

The ninety-four *amici curiae* are organizations from twenty-two countries on six continents, including twenty-three organizations in the U.S., and including several associations of physicians. These organizations are concerned partially or exclusively with the issue of electromagnetic hypersensitivity (“EHS”), the disability from which Plaintiff suffers. It is estimated that 5 to 15 percent of the world’s population develop intolerance to electromagnetic fields (“EMFs”), suffering from EHS symptoms of varying intensity when exposed.

The rapidity with which wireless technology has spread around the world means that governments and courts are just now beginning to grapple with a new reality that did not exist only two decades ago.

The *amici* organizations encounter daily this tragic and absurd reality shared now by millions of adults and children in the U.S. and around the world who have developed intolerance to EMFs, and particularly to radio frequency (“RF”) and microwave radiation, which are the portions of the electromagnetic spectrum used for wireless technologies, including cell phones, cell towers, Wi-Fi, and utility smart meters.

People who have developed EHS are struggling to survive in a wireless world—and many are not surviving. They suffer excruciating pain and life-threatening injury. These effects, documented in this brief, include severe headaches, change in cardiac rate and/or rhythm, sleep disturbances, memory and

cognitive difficulties, dizziness, nausea and vomiting, skin conditions, muscle pain, and extreme fatigue. Many cannot remain in their homes, cannot work, are forced to leave their families, and often end up living in their cars or tents in the woods, desperately looking for a place without radiation in which they can sleep and recover their health. Children with EHS are unable to go to school and are forced to live in physical and social isolation. The proliferation of wireless technology means that people with EHS cannot access public facilities; they cannot walk on the streets, go to a movie, sit in a restaurant, sleep in a hotel, ride on the train or take an airplane. Many people with EHS cannot access medical care facilities. They cannot even access the courts to protect their rights.

People who have developed EHS are seeking to regain their most basic human and civil rights that have suddenly been taken away from them by governments whose laws encourage wireless technology at all costs, and whose lawmakers never envisioned the kind of suffering and the extent of sickness that would result.

This appeal raises issues of significant importance to all the *amici*. The district court, without a trial, denied the very existence of EHS and dismissed Plaintiff's claim that he has the same right as everyone else to live in his own home. Affirmation of the district court's decision may adversely impact not only the life of Plaintiff, but the lives of millions of others who suffer from the same condition, many of whom are represented directly and indirectly by the *amici*.

Conversely, reversal of the decision and remand of the case for trial on the merits would be another step in recognizing that the disabled class represented by the *amici* enjoy the same fundamental rights as everyone else, and have the same right to live in ordinary society, a natural born right.

The legal arguments in Appellant’s Brief in Chief are comprehensive and there is no need for the *amici* to repeat them. The main goal of this *amicus* brief is to bring to the Court’s attention relevant facts that the Court may not be aware of regarding EHS—facts regarding the extent of the problem around the world; the terrible impact it is having on a growing class of people with a new disability; and the governments that are being forced to grapple with the problem, although they would rather not, because of its sheer magnitude. In other words, the *amici* will place this problem for the Court into a social, political, and historical context.

It is appropriate for *amici* to bring such facts to the Court’s attention. The role of an *amicus* “‘is to call the court’s attention to facts or situations that may have escaped consideration.’” *Lopez v. Las Cruces Police Department*, 2006-NMCA-074, ¶ 7, 139 N.M. 130, 137 P.3d 670, quoting *State ex rel. Burg v. City of Albuquerque*, 31 N.M. 576, 590-91, 249 P. 242 (1926). This brief aims to ensure that the Court will have all the relevant facts presented to it before reaching a determination that may impact directly and indirectly the lives of millions of people in the U.S. and worldwide.

ARGUMENT

I. EHS is a Widespread Condition

The most obvious indication that EHS is widespread is the number of organizations that have joined this *amicus* brief despite short notice, and the number of people they represent—people who either have EHS or belong to organizations focusing partially or wholly on EHS. Brief descriptions of the *amici*, as given to me, are set forth in the beginning of this brief. Stop Smart Meters, for example, based in California, has received written testimony from over 2,000 individuals injured just by smart meters in the few years since they started to be deployed. Citizens for Safe Technology represents over 30,000 individuals in British Columbia alone. The Cuffe Parade Residents Association in Mumbai, India represents 25,000 people; the 16 residents associations that have joined this brief from the city of Mumbai alone represent together well over 100,000 people. The mast-victims.org website, based in the United Kingdom and Denmark, has had over 10 million visitors since 2005.

A number of surveys of the prevalence of EHS have been conducted by governments and universities. In 2001, the Swedish National Board of Health and Welfare found that 3.1 percent of the population reported having EHS.¹ The number reported by the California Department of Health Services in 2002 was 3.2

¹ National Board of Health and Welfare (Socialstyrelsen). *Environmental Health Report*. Stockholm, Sweden, 2001, in Swedish.

percent.² In the same year, the Federal Office of Radiation Protection, in Germany, reported 6 percent.³ In 2004, Dr. Elaine Fox at the University of Essex, UK, reported 11 percent.⁴ In 2006, researchers at the University of Bern, Switzerland, reported 5 percent.⁵ The trend is generally increasing.⁶ In 2000, the Institute for Working Life, in Sweden, reported that 12.5 percent of the engineers in the electronics industry have EHS.⁷ If at least 5 percent of the world's population has EHS, then roughly 350 million people either do now, or soon will have trouble

² Levallois, P., Neutra, R., Lee, G., Hristova, L. Study of self-reported hypersensitivity to electromagnetic fields in California. *Environmental Health Perspectives* 110(suppl 4): 619-23, 2002.

³ Schroeder, E. *Stakeholder perspectives on amending the 26th Federal Emission Control Ordinance. Results of the nationwide telephone survey ordered by the Federal Office of Radiation Protection.* Schr/bba 04.02.26536.020, Munich, Germany, 2002, in German.

⁴ Fox, E. *Rapporteur's Report.* Proceedings of the International Workshop on Electromagnetic Hypersensitivity, Prague, Czech Republic. World Health Organization, 2004, p. 12. (Plaintiff's Exhibit 5).

⁵ Schreier, N., Huss, A., Rösli, M. The prevalence of symptoms attributed to electromagnetic field exposure: a cross-sectional representative survey in Switzerland. *Sozial- und Präventivmedizin/Social and Preventive Medicine* 51:202-209, 2006.

⁶ Hallberg, Ö. and Oberfeld, G. Letter to the Editor: Will We All Become Electrosensitive? *Electromagnetic Biology and Medicine* 25:1889-191, 2006.

⁷ Affidavit of Olle Johansson (Record Proper ("RP") at 1748), citing Eriksson, N., Höög, J., Hansson Mild, K., Sandström, M., Stenberg, B., "Förekomst av symtom liknande 'sjuka hus-sjuka,' bildskärmsrelaterade hudbesvär och 'elöverkänslighet' i den vuxna svenska befolkningen" ("Prevalence of symptoms similar to 'sick building syndrome,' computer screen-related skin conditions and 'electrohypersensitivity' in the adult Swedish population"), *Arbetslivrapport* no. 2000:5, Arbetslivsinstitutet, Umeå (2000).

surviving as microwave radiation from various wireless technologies becomes rapidly inescapable.

II. EHS is Widely Recognized in the U.S. and Internationally

The lower court ruled that Plaintiff's experts may not testify, and his case should not go to trial, because his experts' opinions about EHS are "not generally accepted" (RP⁸ 5006), and EMFs are "not recognized" as causing EHS (RP 5007). Plaintiff has shown that this ruling is legally wrong. (Appellant's Brief in Chief, pp. 15-16). Not only has the "generally accepted" standard of *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir.1923) been overruled in the federal courts by *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 587 (1993), and in New Mexico by *State v. Alberico*, 1993-NMSC-47, ¶46, 116 N.M. 156, 861 P.2d 192, but it is the experts' *methodologies* and not their opinions that are to be judged under Rule 11-702 NMRA, whether under the *Frye* or the *Daubert* tests. "The focus... must be solely on principles and methodology, not on the conclusions that they generate." *State v. Torres*, 1999-NMSC-010, ¶ 34, 127 N.M. 20, 976 P.2d 20, quoting *Daubert*, 509 U.S. at 595.

Amici will show that the lower court's ruling is also factually wrong. First, the record shows that an overwhelming amount of evidence in the form of scientific articles and government documents proving the reality of EHS and its causation by EMFs was submitted to the court and ignored. Some of this evidence

⁸ "RP" denotes pages of the record proper.

will be discussed below. Second, many cities, government agencies, courts, hospitals, and medical organizations around the world recognize EHS as a disease and a disability caused by EMFs in no uncertain terms.

A. United States Access Board

The United States Architectural and Transportation Barriers Compliance Board (“Access Board”) is the federal agency that establishes and maintains accessibility guidelines under the Architectural Barriers Act of 1968, 42 U.S.C. § 4151 *et seq.*; Title II and Title III of the Americans with Disabilities Act (“ADA”), 42 U.S.C. § 12131 *et seq.* and § 12181 *et seq.*; and Telecommunications Act § 101, 47 U.S.C. § 255; provides technical assistance to individuals and entities with rights or duties under the ADA; and otherwise administers the federal laws concerned with the protection of people with disabilities. 29 U.S.C. § 792.

Although the Access Board has not yet established mandatory requirements for accommodating people with EHS, it acknowledged the need to do so in 2002, and again in 2004:

The Board recognizes that multiple chemical sensitivities and electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual’s major life activities. The Board plans to closely examine the needs of this population, and undertake activities that address accessibility issues for these individuals.

The Board plans to develop technical assistance materials on best practices for accommodating individuals with multiple chemical sensitivities and electromagnetic sensitivities. The Board also is

sponsoring a project on indoor environmental quality. In this project, the Board is bringing together building owners, architects, building product manufacturers, model code and standard-setting organizations, individuals with multiple chemical sensitivities and electromagnetic sensitivities, and other individuals. This group will examine building design and construction issues that affect the indoor environment, and develop an action plan that can be used to reduce the levels of chemicals and electromagnetic fields in the built environment.

Fed. Reg. 67(170):56354, Sept. 3, 2002; *Fed. Reg.* 69(141):44087, July 23, 2004.

The promised technical assistance manual for accommodating people with multiple chemical sensitivities (“MCS”) and EHS, developed by the National Institute of Building Sciences, was issued on July 14, 2005, and is available on the Access Board’s website and at pages 1414-1511 of the record proper in this case.

Recommendations for accommodating people with MCS and EHS in courthouses are found on pages 130-131 of *Justice for All: Designing Accessible Courthouses*, issued by the Access Board on November 15, 2006 (RP 1410-13).

The 97-page technical assistance manual, *IEQ Indoor Environmental Quality*, lists the following elements of modern life that people with EHS must avoid, and which make their situation in the world increasingly urgent:

For people who are electromagnetically sensitive, the presence of cell phones and towers, portable telephones, computers, fluorescent lighting, unshielded transformers and wiring, battery re-chargers, wireless devices, security and scanning equipment, microwave ovens, electric ranges and numerous other electrical appliances can make a building inaccessible.

IEQ, p. 11 (RP 1425). In order to accommodate people with this disability, certain guidelines are prescribed. For example:

It is recommended that cell phone use be prohibited in areas of a building when requested by an electromagnetically sensitive individual who needs to work or visit that area.

IEQ, p. 19 (RP 1433). The adoption of a National Cleaner Air Symbol is proposed: The national symbol shall be the standard used to identify a room, facility, and paths of travel that are more accessible to and useable by people who are adversely impacted by airborne pollutants... and/or people who are adversely impacted by electromagnetic fields from electrical fixtures and equipment such as those with electromagnetic sensitivities.

IEQ, p. 49 (RP 1463). Recommended policies for such accessible rooms include “Cell Phones Turned Off” and “Ability to turn off or unplug computers and other electrical equipment by occupant or staff.” *IEQ*, p. 51 (RP 1465).

The document states categorically that entities covered by the ADA are *required* to accommodate people with EHS:

According to the Americans with Disabilities Act (ADA) and other disability laws, *public and commercial buildings are required to provide reasonable accommodations for those disabled by chemical and/or electromagnetic sensitivities...*

Reasonable accommodations for a chemically sensitive and/or electromagnetically sensitive individual can include providing a space or meeting area that addresses one or more of the Cleaner Air criteria, upon request, such as...

- Require cell phones and computers be turned off
- Provide incandescent lighting in lieu of fluorescent lighting

IEQ, p. 52 (RP 1466) (*emphasis added*).

In designing buildings for people with EHS, technical standards are prescribed for keeping ambient magnetic fields below 1 milligauss (p. 71 (RP 1485)), and for designating “areas free from use of cell phones, two-way radios, and wireless equipment.” (p. 72 (RP 1486)). Building sites should be selected that are not close to substations, cell phone towers, radio towers, high tension lines, radar installations, airports, and other exterior sources of EMFs. (p. 74, RP 1488).

All these opinions come from the U.S. federal agency charged with enforcing disability laws. The reason people with EHS have not generally been accommodated until now has to do not with science or law, but with the lack of political will to enforce the law, and with poor access to the courts by people who have been completely marginalized by society, and who have no financial resources due to the presence of wireless technology in virtually all workplaces.

B. Council of Europe

The list of *amici* shows that EHS is a particularly pressing problem throughout Europe—not surprisingly, since Europe is more densely populated with both human beings and cell phones than the United States. The plight of people with EHS has been recognized at the highest levels of European government—the European Parliament and the Council of Europe.

The Council of Europe (“Council”) represents 47 countries and 800 million people. The best known bodies of the Council are the European Court of Human Rights, which enforces the European Convention on Human Rights, and the European Pharmacopoeia Commission, which sets quality standards for pharmaceutical products throughout Europe. The Council is governed by a Parliamentary Assembly which, on May 27, 2011, adopted a resolution titled *The potential dangers of electromagnetic fields and their effects on the environment*. It urged its member nations specifically to adopt measures to protect people with EHS:

[T]he Assembly recommends that the member states of the Council of Europe... pay particular attention to “electrosensitive” persons suffering from a syndrome of intolerance to electromagnetic fields and introduce special measures to protect them, including the creation of wave-free areas not covered by the wireless network.

Resolution 1815 (2011), § 8,1.4. (Supplemental Record, Exhibit 23-v to Staudenmayer Affidavit). The explanatory memorandum by Mr. Huss, rapporteur, clarifies:

The research performed, for instance, by Professor Dominique Belpomme, President of the Association for Research and Treatments Against Cancer (ARTAC), on more than 200 people describing themselves as “electrosensitive” succeeded, with corroborative results of clinical and biological analyses, in proving that there was such a syndrome of intolerance to electromagnetic fields across the whole spectrum of frequencies.

The potential dangers of electromagnetic fields and their effect on the environment, Doc. 12608, report of the Committee on the Environment, Agriculture and Local and Regional Affairs, May 6, 2011.

C. European Parliament

The European Parliament passed a similar resolution on April 2, 2009:

The European Parliament... whereas, however, there are some points that appear to be the subject of general agreement, in particular the idea that reactions to microwave exposure vary from one person to another... Calls on Member States to follow the example of Sweden and to recognize persons that suffer from electrohypersensitivity as being disabled so as to grant them adequate protection as well as equal opportunities.

Resolution 2008/2211(INI), *Health concerns associated with electromagnetic fields*, ¶¶ H, 28. However, governments move slowly; and the people are acting to establish “white zones” free of radiation. One of the *amici*, Next-Up, for example, has succeeding in establishing the first such refuge for people with EHS in a

remote area of the French Alps. Another *amicus*, Wave Analysis Verification Research, not waiting for American authorities to act, is presently building a refuge for people with EHS in Green Bank, West Virginia.

D. Austrian Medical Association

Dr. Gerd Oberfeld, who works for the Public Health Department of the state of Salzburg, Austria, has been researching the health effects of electromagnetic fields in general and EHS in particular for many years, and he has been in the forefront of the movement to provide people with EHS real accommodations in society. He is the Head of the EMF Working Group of the European Academy of Environmental Medicine, which is one of the *amici*. He is the lead author of an epidemiological study filed in this case titled “The microwave syndrome: further aspects of a Spanish study” (RP 357-64),⁹ and the coauthor of “Letter to the Editor: Will We All Become Electrosensitive?” cited above.

Salzburg’s Public Health Department officially advises schools not to use Wi-Fi or cordless telephones:

Based on first empirical evidence from sensitive people the signal seems to be very “biologically active.” The symptoms seen so far are the same seen in base station studies: headaches, concentration difficulty, restlessness, memory problems, etc.

⁹ *Proceedings of the 3rd International Workshop on Biological Effects of Electromagnetic Fields, Kos, Greece, October 4-8, 2004.*

The official advice of the Public Health Department of the Salzburg region is not to use WLAN [Wi-Fi] and DECT [cordless phones] in Schools or Kindergartens.¹⁰

On March 3, 2012, the Austrian Medical Association adopted guidelines for the diagnosis and treatment of EHS:

In general, a wide variety of forms of EMF exposure (e.g. from cordless phones, wireless internet access, electrical installations and electrical devices in the building, mobile phone base stations, radio and TV transmitters, high-voltage lines or transformer stations) may be the root causes of health problems.

We recommend that the code Z58.4 (Exposure to radiation) under the International Classification of Diseases (ICD-10) be used for EMF syndrome for the time being.

The primary method of treatment should consist in the prevention or reduction of EMF exposure, taking care to reduce or eliminate all sources of EMF if possible.

*Guideline of the Austrian Medical Association for the diagnosis and treatment of EMF related health problems and illnesses (EMF syndrome).*¹¹

E. Sweden

The modern term “electromagnetic hypersensitivity” seems to have originated in Sweden. But the story of EHS in Sweden really goes back to the mid-20th century, and is connected with research in another part of the world.

¹⁰ “WLAN and DECT in Schools and Kindergartens,” opinion signed by Gerd Oberfeld, M.D., December 5, 2005.

¹¹ Available on the website of the Freiburger Appeal (discussed below): <http://freiburger-appell-2012.info/media/EMF%20Guideline%20OAK-AG%20%202012%2003%2003.pdf>

EHS was first established by physicians as a radiation-caused disease over 60 years ago in a totally different context than that in which we know it today. In the days before the commercialization of cell phones and wireless technology, exposure to microwave radiation was largely confined to workplaces, and EHS had a different name, “microwave sickness.”

After World War II, when radar technology—which uses microwave frequencies similar to today’s wireless technologies—came into widespread use in Cold War countries, doctors in the U.S. and the Soviet Union began to receive reports of illness following exposure to radar. The Soviet Union established clinics in Moscow, St. Petersburg, and other major cities dedicated to the diagnosis and treatment of this new disease acquired by radar workers. The new disease was called “microwave sickness” or “radio wave sickness.”¹² Medical textbooks on radio wave sickness were already being written by 1971,¹³ and today in Russia the health effects of radio waves are taught in universities and medical schools, both as

¹² Letavet, A.A. and Gordon, Z.V., eds. *The Biological Action of Ultrahigh Frequencies*. Academy of Medical Sciences, Moscow, 1960. Joint Publications Research Service (JPRS) 12471.

¹³ Tyagin, N.V.. *Klinicheskie Aspektiy Oblucheniya SVCh-Diapazona* (“*Clinical Aspects of Irradiation in the SHF-range*”). Izd-vo “Meditsina,” Leningrad 1971.

part of courses on occupational diseases¹⁴ and as subjects in their own right.¹⁵ But the effects of radio waves seemed to be felt by a minority of the population. In 1960 it was reported by Sadchikova that among workers exposed to radio waves on the job, the number who got sick was about 15%.¹⁶ In 1974, after another decade and a half of clinical research, the same author again stated that the frequency of radio wave sickness “did not exceed 15%.”¹⁷ Another researcher, measuring brain waves, found abnormal activity on the EEG in 14.3% of workers at a radio transmitting station.¹⁸

While the U.S. government did not act on the complaints it received, the U.S. military did. Although it is commonly believed that there is “not enough research” on the health effects of electromagnetic radiation, the Navy funded

¹⁴ Izmerov, N.F., Denisov, E.I., eds. *Professional'nyy risk* (“Occupational Risk”). Moscow: Sotsizdat 2001; Izmerov, N.F., V.F. Kirillova, eds. *Gigiena truda* (“Occupational Hygiene”). Moscow: GEOTAR-Media 2008.

¹⁵ Kudryashov, Yu.B., Perov, Yu.F., Rubin, A.B. *Radiatsionnaya biofizika: radiochastotnye i mikrovolnovye elektromagnitnye izlucheniya* (“Radiation Biophysics: Radiofrequency and Microwave Electromagnetic Radiation”). Moscow: Fizmatlit 2008.

¹⁶ Sadchikova, M.N. State of the nervous system under the influence of UHF. In *The Biological Action of Ultrahigh Frequencies*, A.A. Letavet and Z.V. Gordon, eds., Academy of Medical Sciences, Moscow, 1960, JPRS 12471, pp. 25-29.

¹⁷ Sadchikova, M.N. Clinical manifestations of reactions to microwave irradiation in various occupational groups. In P. Czerski et al., eds., *Biologic Effects and Health Hazards of Microwave Radiation: Proceedings of an International Symposium*, Warsaw, 15-18 Oct., 1973, pp. 261-267 (1974).

¹⁸ Klimkova-Deutschova, E. Neurologic findings in persons exposed to microwaves. In P. Czerski et al., eds., pp. 268-272.

extensive research into the subject, and compiled thousands of studies proving these effects from around the world. Dr. Allan Frey, for example, was funded by the Navy to investigate damage to the blood-brain barrier caused by low-level microwave radiation. See A.H. Frey, "Neural function and behavior: defining the relationship," *Annals of the New York Academy of Sciences* 247:433-439 (1974) (RP 248-254); A.H. Frey, "Evolution and Results of Biological Research with Low-Intensity Nonionizing Radiation," *Modern Bioelectricity*, A.A. Marino, ed., Marcel Dekker, NY (1988) (RP 235-247, 221-234).

The Navy also commissioned Lieutenant Zorach Glaser, Ph.D. to locate and catalogue all of the world's scientific literature on the health and biological effects of radio frequency and microwave radiation. The catalogue of the first 2,311 documents collected by Glaser, printed in 1972, is in the record of this case (RP 815-920)¹⁹, as is the 1984 index to all 5,087 documents that he catalogued²⁰ (RP 669-814).

When the first personal computers went on sale in 1977, intense, daily, prolonged exposure to electromagnetic fields became common and normal for the first time in human history. These fields were predominantly well below the

¹⁹ Glaser, Z.R., *Bibliography of Reported Biological Phenomena ("Effects") and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation*, AD750271, Naval Medical Research Institute, Bethesda, Maryland, April 20, 1972.

²⁰ Glaser, Z.R., *Cumulated Index to the Bibliography of Reported Biological Phenomena ("Effects") and Clinical Manifestations Attributed to Microwave and Radiofrequency Radiation*, Julie Moore & Associates, Riverside, CA, 1984.

microwave frequency range, and their most obvious effect was in the form of severe facial skin lesions. Dr. Olle Johansson, a neuroscientist at the Karolinska Institute in Stockholm, Sweden, became interested in the problem early on, naming the new disease “screen dermatitis” because it was caused in susceptible people by sitting for hours in front a computer screen. Dr. Johansson’s curriculum vitae (RP 1750-69) and his affidavit (RP 1742-49) are in the record, as are some of his published articles (RP 255-300, 1770-1790). When cell phones became popular in Sweden in the mid-1990s, and daily, prolonged exposure to microwave radiation was added to the daily exposure to computer screens, the same people who had developed screen dermatitis reacted to their cell phones—and to cell towers and other sources of microwave radiation—in the precise same way the Soviets had been describing for over four decades: with dizziness, nausea, headaches, confusion, sleep disturbance, memory loss, unstable pulse and blood pressure, cardiac abnormalities, and so forth.

In Sweden, EHS is a fully-recognized disability whose sufferers enjoy legal protection to the same extent as people with any other disability. Hospitals in Umeå, Skellefteå, and Karlskoga have “special rooms with very low EMFs so that people who are hypersensitive can get medical care.”²¹ Dr. Olle Johansson, who

²¹ Johansson, O. Electrohypersensitivity: State-of-the-Art of a Functional Impairment, *Electromagnetic Biology and Medicine* 25:245-258 (2006), p. 252 (RP 262).

has been studying the condition in his country for more than three decades, says the following:

I introduced the clinical term “screen dermatitis” to explain the cutaneous damages that developed in the late 1970’s when office workers, first mostly women, began to be placed in front of computer monitors.

In our experience in the Experimental Dermatology Unit, symptoms of the skin, the nervous system and the heart dominate the picture in electrohypersensitive persons.

In Sweden electrohypersensitivity (EHS) is an officially fully recognized functional impairment. Survey studies published by the Swedish National Board of Health and Welfare show that somewhere between 230,000-290,000 Swedish men and women report a variety of symptoms when being in contact with electromagnetic field (EMF) sources. They have the legal right to work in spite of their impairment. For example, they can get low-emission computers, high-frequency fluorescent lamps can be changed to ordinary light bulbs, and wireless telephones can be removed from their work spaces.

Affidavit of Olle Johansson (RP 1742-49), ¶¶ 5, 7, 12.

Dr. Johansson is the scientific advisor to Elöverkänsligas Riksförbund, the main Swedish organization for people with EHS, which is one of the *amici*.

F. India

Contrary to popular belief, EHS is by no means confined to the developed, western world. *Amici* include organizations in Columbia and Namibia. But the largest and most numerous *amici* are from India, where the sudden, ubiquitous presence of microwave radiation in a country that until recently had little or no

technology has been keenly felt by large numbers of people. The largest state in India—Rajasthan—and the largest city in India—Mumbai—are leading the way in protecting the population.

(1) Rajasthan

An Inter-Ministerial Committee of the Central Government of India, consisting of officials from the Department of Telecommunications, the Ministry of Health, the Department of Biotechnology, and the Ministry of Environment and Forests issued a report in 2012 recommending restricting the placement of cell towers on schools, playgrounds, hospitals, and other sensitive locations.²² This recommendation is now law in Rajasthan, prohibiting towers altogether in such locations.

On August 22, 2012, the High Court of Rajasthan issued its first decision concerning the proposed bylaws, ordering that all cell towers located on school buildings be removed immediately.²³ One week later, on August 31, 2012, the

²² Order, Nov. 27, 2012, *Pearl Green Acres Owner v. Ministry of Telecommunications*, Case No. CW-17867 (at 11, 80). Available on Right to Information India website at file:///C:/Users/patron/Downloads/No%20mobile%20towers%20near%20schools,%20hospitals,%20directs%20Rajasthan%20High%20Court%20(1).pdf

²³ *Id.* at 127-34.

proposed bylaws were adopted by the state government,²⁴ and on September 7, 2012, the Supreme Court of India dismissed a request by the Cellular Operators Association of India to reverse the High Court's order.²⁵

On November 27, 2012, the High Court issued a definitive 217-page decision reviewing the literature on the health and environmental effects of RF radiation, summarizing in some detail the results of 85 different studies from around the world, including studies on EHS:

Netherlands Organization for Applied Scientific Research, TNO, (2003) studies the effects of Global Communications System Radio-Frequency Fields on Well Being and Cognitive Function of Human Subjects with and without Subjective Complaints and reported significant effects on well being of the people i.e., *headaches, muscle fatigue/pain, dizziness etc. from 3 G mast emissions*. Those who had previously been noted as “electro-sensitive” under a scheme in that country were shown to have more pronounced ill-effects.

(emphasis original).²⁶ The TNO (2003) study is in the record of the present case (RP 1163-1250).

Austria 2005: When Electro sensitive men (3) and women (9) were exposed to RFR emitted from a shielded cell phone base station in phase manner all of them reported symptoms like *buzzing in the head, palpitations of the heart, un-wellness, lightheadedness, anxiety, breathlessness, respiratory problems etc.* This study shows significant changes of the electrical currents in the brain by a cell phone base station at a distance of *80 meters*.

(emphasis original).²⁷

²⁴ *Id.* at 125-27.

²⁵ *Id.* at 134.

²⁶ *Id.* at 69.

²⁷ *Id.* at 70-71.

On the basis of its review, the High Court upheld every aspect of the new bylaws:

We find that order with respect to schools passed by this Court has attained finality in view of dismissal of SLP of COAI by the Hon'ble Supreme Court and in compliance of the said order, towers & BTSs located on the schools in the entire State of Rajasthan have been removed. The towers are also required to be removed from colleges buildings as continuous EMF radiation exposure to students taking education in colleges is harmful.

The bye-laws framed with respect to prohibiting installation of towers on playgrounds, hospitals... and also near ancient monuments and old heritage buildings cannot be said to be illegal or arbitrary in any manner whatsoever, rather they are wholesome and have been framed so as to safeguard the health of people... hospital is a sensitive place where infants, newly born child, pregnant women, patients of various diseases are treated, they are vulnerable and they require protection from EMF radiation from mobile tower and thus, if towers are not removed from hospitals, it would enhance the agony of the patients taking treatment of various diseases in the hospitals.²⁸

(2) Mumbai

The city of Mumbai has adopted²⁹ a policy that it drafted on January 21, 2013, and which is similar to the policy of the state of Rajasthan. Placement of an antenna, dish antenna, or tower used for telecommunications on top of an apartment building requires “70% consents of occupants.” In addition, such structures:

- 8) Shall not be allowed on Schools, Colleges & Hospitals, the towers will not be allowed on Children correction homes (Balsudhrgriha), *Vrudhashram* and hostels / orphanage buildings for children.

²⁸ *Id.* at 210-212.

²⁹ “BMC dumps top-floor residents in fresh mobile tower policy,” *Mumbai Mirror*, Feb. 26, 2014. <http://www.mumbaimirror.com/mumbai/civic/BMC-dumps-top-floor-residents-in-fresh-mobile-tower-policy/articleshow/31010016.cms>.

- 9) Shall not be allowed on any adjoining building within 3m. from building of school/ colleges/ hospital/ Children hostels/ orphanage buildings and the antenna should not be directed/ positioned towards these buildings.

(Revised Draft Policy Guidelines for Installation of Mobile Towers in the City of Mumbai, No. che/D.P./32666/Gen of 21/01/2013).³⁰

G. Israel

In Israel, one of the most highly technological societies in the world, the problem of EHS among school children has come to the attention of the Israeli Supreme Court—and the Court is considering a ban on Wi-Fi in Israeli schools because of the extent of the problem.

Counsel for *amici* is one of seven petitioners in Case No. 6269/12, *National Parents Leadership et al. v. Minister of Education et al.*, filed in the High Court in 2012.³¹ The petitioners are asking for an injunction prohibiting Wi-Fi in all Israeli schools to protect the health of children. The other government respondents are the Ministry of Health and the Ministry of Environmental Protection. On April 23, 2014, after 20 months of litigation, a conditional injunction (similar to an order to show cause in the U.S.) was granted, which will become an unconditional

³⁰ Available on the website of the Municipal Corporation of Greater Mumbai: www.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Public%20Relation%20Officer/Press%20Release/Public%20Notice%20for%20Chief%20Engineer%20Development%20Plan%20Department%20eng.pdf

³¹ All quoted decisions are published in Hebrew on the court's website, <http://elyon1.court.gov.il/verdictssearch/HebrewVerdictsSearch.aspx>. The quotations in this brief are exact translations done by the undersigned attorney for *amici*.

(permanent) injunction if the government lawyer does not prove why the use of wired computers in schools is not feasible.

While the 2012 Petition did not specifically ask the High Court to rule on the issue of EHS, that issue became the center of the case after widespread sickness of children with EHS was exposed to the Court, and the Court's decision of April 23, 2014 was in large part a response to that evidence.

On July 18, 2013, after the second round of briefing, the High Court had issued a Decision ordering the government to find out how many children suffer from EHS:

2. Respondents must submit an Update Brief no later than 16/11/2013 in which reference must be made to the following issues:
 - a. The number of schools in which a wired network has been installed (out of all the schools in the country).
 - b. The number of schools in which the wired network is actually used (this data is important as there may be schools in which both a wired and wireless network have been installed).
 - c. The number of children who suffer from special sensitivity to non-ionizing radiation. The respondents must elaborate as to what action, if any, was taken to locate these children.

The Update Brief must be supported with an affidavit.

3. The Claimants will be allowed to respond to the Update Brief within 15 days.

However, the respondents did not comply: they did not provide data on how many children in Israel have EHS. However, the undersigned provided the Court with

affidavits regarding 13 children who became EHS after the installation of Wi-Fi in their schools. Extrapolating from the response rate to her limited inquiry, she showed that her data support the existence of a widespread epidemic among Israeli children.

After this submission, the Education Committee of the Israeli Parliament, the Knesset, held a hearing on March 19, 2014 on “The threat to the educational system of electromagnetic radiation from various sources.”³² Parents of children who have EHS symptoms while at school testified.³³ There was testimony about 16 children with severe headaches at a school in Tel Aviv,³⁴ and 80 children in a school in Rishon LeZion suffering from headaches, itching, and vomiting.³⁵ One parent at that school, Yakov Ben-Ami, testified:

[M]y daughter comes home after school, grabs her head like this, I take the rope of my bathrobe and tie it around her head to help her get rid of the headache. At night she suddenly wakes up, throws up her soul. Just sits in the bathroom and throws up her soul, and I don't know how to help her.³⁶

³² Protocol No. 182, Parliamentary Committee on Education, Culture and Sport, March 19, 2014. Transcript of hearing available in Hebrew at <http://knesset.gov.il/protocols/data/rtf/chinuch/2014-03-19.rtf>

³³ *Id.*, pp. 24-51.

³⁴ *Id.*, p. 37.

³⁵ *Id.*, p. 39.

³⁶ *Id.*

The school in Rishon LeZion had 3 cell tower antennas approximately 60 meters away, located on the roof of a mall, as well as Wi-Fi throughout the school.³⁷

Even Professor Stelian Gelberg, the Head of the Noise and Radiation Abatement Department of the Ministry of Environmental Protection—one of the respondents in the lawsuit—acknowledged that EHS is a problem caused by EMFs and that Wi-Fi should be removed from schools:

This is an exposure which we in the Ministry for Environmental Protection think is not justified, considering there is an alternative which is a wired network... We also think that as long as a child is obliged to attend school, when it is compulsory for the child to attend school, and we realize there are children—in Israel and abroad—children who suffer from hypersensitivity to the issue of radiation, and just as a school is adjusted to accommodate the needs of a child with a disability, there is no reason not to do something similar for a child who has hypersensitivity to the issue of radiation.³⁸

On April 23, 2014, having received these reports and having failed to receive the requested data from the respondents, the High Court ruled:

A conditional injunction is hereby issued which orders the Respondents to come and show cause why the Ministry of Education should not act in accordance with the official document issued by the Ministry on 10.7.2012, titled “Adjusting the Education System to the 21st Century – Integrating Communication and Computer Equipment Into Schools – Health and Safety Implications.”

An Answer in the form of an affidavit will be submitted by 15.7.2014.

³⁷ *Id.*, p. 29. The antennas were removed on May 29, 2014.

³⁸ *Id.* at 7.

H. Germany

On October 9, 2002, an association of German doctors specializing in environmental medicine began circulating a document calling for a moratorium on new antennas and towers used for mobile phone communications.³⁹ It also called for a “[b]an on mobile telephone use and digital cordless (DECT) telephones in preschools, schools, hospitals, nursing homes, events halls, public buildings and vehicles (as with the ban on smoking)” and the establishment of “[m]obile telephone and HFMR [high-frequency microwave radiation]-free zones.” Electromagnetic radiation, they said, was causing a drastic rise in both acute and chronic diseases, prominent among which were “extreme fluctuations in blood pressure,” “heart rhythm disorders,” and “heart attacks and strokes among an increasingly younger population.”

The appeal created a stir in Europe, because before a year had passed, over 1,000 medical doctors had signed the petition, known as the Freiburger Appeal.⁴⁰ (Supplemental Record, Exhibit 23-u to Staudenmayer Affidavit (includes a list of hundreds of signatories)).

³⁹ The English version that is in the record says only, “A say on the part of local citizens and communities regarding the placing of antennae.” The German appeal, calling for “[k]ein weiterer Ausbau der Mobilfunktechnologie,” (“no further buildout of mobile telephone technology”) is available here: http://www.elektrosmognews.de/Freiburger_Appell.pdf

⁴⁰ Interdisziplinäre Gesellschaft für Umweltmedizin e. V., *Freiburger Appeal*, October 9, 2002.

By 2012, 36,000 individuals (doctors, scientists, and others) had signed the petition, and a new, more urgent update to the Appeal was issued, specifically addressing the issue of people with EHS—those who feel the radiation in real time, and for whom the inability to escape it is torture:

The number of those who suffer from electrohypersensitivity is steadily growing. They can develop severe symptoms immediately or even several hours after the exposure to technical electromagnetic fields.⁴¹

I. Canada

Both Ontario and Nova Scotia have large, mainstream medical hospitals that have clinics dedicated to the diagnosis and treatment of EHS, MCS, and other environmental diseases. Women’s College Hospital, in Toronto, was founded in 1883 and is affiliated with the University of Toronto. A June, 2012 interview with the director of its Environmental Health Clinic is highlighted on the hospital’s website:

“We need to create more awareness about this condition,” said Dr. Riina Bray, medical director, Environmental Health Clinic, WCH. “Health-care practitioners need to better understand EMS [electromagnetic sensitivity] so they can help their patients prevent and manage their symptoms. The public needs to know how to protect themselves from the broad range of health impacts electromagnetic fields have on their minds and bodies.”⁴²

⁴¹ http://freiburger-appell-2012.info/media/International_Doctors_Appeal_2012_Nov.pdf

⁴² “The effects of invisible waves,” June 11, 2012. <http://www.womenscollegehospital.ca/news-and-events/connect/the-effects-of-invisible-waves>

The Nova Scotia Environmental Health Centre, formerly part of Dalhousie University, has been renamed the Integrated Chronic Care Service,⁴³ and is now part of Capital Health, Canada's largest provider of health services.⁴⁴ It sees a similar spectrum of patients as Women's College Hospital. Its medical director, Roy Fox, M.D. stated in a May 2012 interview:

We always have 600-700 patients [with environmental illnesses] at one time... The nervous system [has] not learned to be aware of EMFs because it was not useful historically. But when the nervous system detects a change, for example when entering in a strong electromagnetic field that is interpreted as a threat, it goes into arousal and a fight or flight response.

He advised avoidance of exposure to EMFs as the primary method of treatment.⁴⁵

J. United States

Children are becoming EHS in the United States too. In response, the American Academy of Environmental Medicine issued a general advisory to schools on November 14, 2013, urging them in the strongest terms to avoid the use of Wi-Fi because of the danger to children with EHS:

The AAEM strongly supports the use of wired Internet connections, and encourages avoidance of radiofrequency such as from Wi-Fi, cellular and mobile phones and towers, and "smart meters."

⁴³ <http://www.cdha.nshealth.ca/integrated-chronic-care-service>

⁴⁴ <http://www.cdha.nshealth.ca/about-us>

⁴⁵ André Fauteux, Electrosensitivity caused by chronic nervous system arousal – Dr Roy Fox, *La Maison du 21e Siècle*, May 1, 2012 (<https://maisonsaine.ca/sante-et-securite/electrosmog/ehs-royfo.html>).

The peer reviewed, scientific literature demonstrates the correlation between RF exposure and neurological, cardiac, and pulmonary disease as well as reproductive and developmental disorders, immune dysfunction, cancer and other health conditions. The evidence is irrefutable...

Until we can determine why some get sick and others do not, and some are debilitated for indeterminate amounts of time, we implore you to not take the risk, particularly with the health of so many children with whose safety you have been entrusted.⁴⁶

K. Boston and Philadelphia

On November 18, 2013, the cities of Boston and Philadelphia submitted the following statement to the Federal Communications Commission (“FCC”), invoking the legal requirements of the ADA, and pointing to “massive evidence” of the “crippling effects” of RF radiation on people with EHS:

The 1999-2000 judicial challenge to the FCC’s 1996 rules never reached the issue of “electrosensitivity” as a cognizable disability under the Americans with Disabilities Act. (“ADA”) Here again, an agency responsible for ADA implementation acknowledges that the impairment may be disabling but has promised merely further inquiry. After more than a decade, that investigation remains unopened. The dockets here have been updated with massive additional evidence of the crippling effects of RF radiation on an admitted minority—but a suffering minority—of U.S. citizens. The FCC and its sister regulatory agencies share responsibility for adherence to the ADA and should replace promises with serious attention to a serious medical problem. This is one area where the FCC could lead.⁴⁷

⁴⁶ “Wireless Radiofrequency Radiation in Schools,” Nov. 14, 2013. Available on the website of the American Academy of Environmental Medicine: <http://aaemonline.org/docs/WiredSchools.pdf>

⁴⁷ Reply Comments of Cities of Boston and Philadelphia, ET Docket No. 13-84, available on the FCC’s website: <http://apps.fcc.gov/ecfs/document/view?id=7520958735>.

CONCLUSION

The district court's conclusion about "general recognition" of EHS is both legally and factually wrong. It was legal error to dismiss Plaintiff's experts based on their conclusions and not their methodologies. And it was factual error to find that EHS is not "generally recognized." As *amici* have proven in this brief, the disability of EHS affects hundreds of millions of people throughout the entire world and is explicitly recognized by numerous government agencies, scientists, doctors, and courts in many countries, including the United States.

For decades Plaintiff, Mr. Firstenberg, has been warning about this growing problem. In spite of his disability, he has helped large numbers of people in the U.S. and worldwide and his work has saved many lives. He is a very brave and strong-willed man who, despite an inhumane existence (RP 2100-12), does his best to fight for and protect his basic civil and human rights and the rights of others, something very few people with EHS can do. (RP 2114-18). This is the reason so many organizations asked to join this brief, and additional organizations have asked to join since the deadline for notifying the parties passed. They have joined because (1) their lives are a living hell and they, like Mr. Firstenberg, are desperate for relief, and (2) they know Mr. Firstenberg because of his work on their behalf for so many years (RP 2766-67). In this case, he asks the Court to ensure that after years of searching for a home and having to live in his car, he has the right to live in the one home he can tolerate to be in.

It is absurd that the district court dismissed the evidence of 9 doctors who examined him and who determined he is suffering from EHS; two administrative law tribunals that awarded him disability benefits based on EHS and then reconfirmed that determination; the tests and interviews by his own psychologist and that of the Defendant, all revealing that he does not suffer from any psychological disorder; and 93 scientific studies and government documents,⁴⁸ and dismissed Plaintiff's claims without a trial. *Amici* ask the Court to protect Plaintiff's property rights, his ADA rights and his Fourteenth Amendment rights. *Amici* ask the Court to reverse the district court's exclusion of Plaintiff's expert witnesses and its grant of summary judgment to Defendant. *Amici* ask the Court to remand this case and order that it be tried on the evidence, which is overwhelmingly in favor of the relief he has asked for.

Respectfully submitted



Dafna Tachover
2045 CR-23C
East Jewett, NY 12424
(518) 734-5628

⁴⁸ See Appellant's Brief in Chief at 1, 6, 7, 16.

Stefanie Beninato
PO Box 1601
Santa Fe, NM 87504
(505) 988-8022

CERTIFICATE OF SERVICE

I hereby certify that on this date of June 2, 2014, I caused a copy of the Brief of *Amici Curiae* to be sent by First Class Mail to the following:

Christopher L. Graeser, Esq.
Graeser & McQueen, LLC
316 E. Marcy St.
P.O. Box 220
Santa Fe, NM 87504-0220

Joseph L. Romero, Esq.
P.O. Box 4432
Santa Fe, NM 87502

Ann L. Keith, Esq.
400 Gold Ave., S.W., Suite 1300W
Albuquerque, NM 87102-3274



Dafna Tachover