



Dennis Swanson  
Director, Regulatory Affairs

**FortisBC Inc.**  
Suite 100 - 1975 Springfield Road  
Kelowna, BC V1Y 7V7  
Ph: (250) 717-0890  
Fax: 1-866-335-6295  
[electricity.regulatory.affairs@fortisbc.com](mailto:electricity.regulatory.affairs@fortisbc.com)  
[www.fortisbc.com](http://www.fortisbc.com)

February 7, 2013

**Via Email**

Mr. Andy Shadrack  
Director Area D  
Regional District Central Kootenay  
Box 484  
Kaslo, BC V0G 1M0

Dear Mr. Shadrack:

**Re: *FortisBC Inc. (FortisBC or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Advanced Metering Infrastructure Project – Information Requests on Regional District Central Kootenay (RDCK) Evidence***

Please find attached FortisBC's Information Requests to RDCK with respect to its evidence filed in the Company's Application for a CPCN for the Advanced Metering Infrastructure Project.

Sincerely,

A handwritten signature in black ink, appearing to be "Dennis Swanson", written over a horizontal line.

Dennis Swanson  
Director, Regulatory Affairs

cc: Commission Secretary

Registered Interveners

FortisBC Inc. (FortisBC or the Company) Application for a Certificate of Public Convenience and Necessity for the Advanced Metering Infrastructure Project	Submission Date: February 7, 2012
Information Request No. 1 to Electoral Area D Regional District Central Kootenay (RDCK) Evidence (Exhibit C13-17; C13-17-1; C13-18; C13-19)	Page 1

1    **1.0    Reference:    Exhibit C13-17-1 Items 1 to 27**

2            1.1    Please confirm that Mr. Shadrack is not seeking to be qualified as an expert  
 3            witness. If this confirmation is not provided, please answer questions 1.1.1 to  
 4            1.1.7.

5            1.1.1   Please confirm that Mr. Shadrack does not have any academic  
 6            qualifications or degrees in the fields of medicine or the health sciences.

7            1.1.2   Please confirm that Mr. Shadrack is not a physician.

8            1.1.3   Please confirm that Mr. Shadrack has never had any clinical experience  
 9            with patients.

10           1.1.4   Please confirm that Mr. Shadrack is not a registered professional  
 11           engineer.

12           1.1.5   If in any respect the confirmation requested in 1.1 to 1.1.4 cannot be  
 13           provided, please detail in what respect the statements are in error.

14           1.1.6   Has Mr. Shadrack previously submitted evidence to and/or testified  
 15           before courts or regulatory tribunals in Canada or the United States in  
 16           relation to any of the following: the potential health effects of non-ionising  
 17           radio frequency emission (“RF”), medicine, health sciences, wireless  
 18           technologies, the costs and capabilities of “smart grid technologies”  
 19           generally, applications and network communication protocols, including  
 20           metering protocols, or applied cryptography? If so, please submit a list  
 21           that includes the date the evidence was submitted, the matter/docket  
 22           under which the evidence was submitted, and the name of the  
 23           court/regulatory tribunal.

24           1.1.7   Has Mr. Shadrack ever previously been disqualified from acting as an  
 25           expert witness before any courts or regulatory tribunals in Canada or the  
 26           United States? If so, please submit a list of the date Mr. Shadrack was  
 27           disqualified, the matter/docket under which the evidence was submitted,  
 28           and the name of the court/regulatory tribunal.

29    **2.0    Reference:    Exhibit C13-19, Robert McLennan ‘Smart Meters and the 21<sup>st</sup>**  
 30    **Century’**

31           2.1    Please confirm that Mr. McLennan is not a registered professional engineer.

32           2.2    Please confirm that Mr. McLennan has never previously testified (whether in  
 33           written or oral form) as an expert witness before a court or regulatory tribunal in  
 34           the fields of:

35           2.2.1   wireless technologies;

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- 1            2.2.2 the costs and capabilities of “smart grid technologies” generally;
- 2            2.2.3 application and network communication protocols, including metering
- 3            protocols;
- 4            2.2.4 metering;
- 5            2.2.5 industrial control and automation systems; or
- 6            2.2.6 applied cryptography.
- 7            2.3 If in any respect the confirmation requested in 2.1 to 2.2 cannot be provided,
- 8            please detail in what respect the statements are in error.
- 9    **3.0 Reference: Exhibit C13-19, Items 1-5 – Various Documents related to Idaho**
- 10 **Power**
- 11           3.1 Item 5 is Order No. 30726 before the Idaho Public Utilities System. Please
- 12           confirm that the installed (not estimated) Idaho Power cost per meter was greater
- 13           than the \$136 referenced on page 6 of Order No. 30726.
- 14           3.2 Item 4 are the Comments of Commission Staff before the Idaho Public Utilities
- 15           Commission (**Staff Comments**). Please confirm that the Idaho Power cost per
- 16           meter of \$136 per meter referenced on page 6 of Order No. 30726 does not
- 17           include:
- 18           (a) Sales Taxes;
- 19           (b) Allowance for Funds Used During Construction (the financing cost
- 20           incurred during construction);
- 21           (c) Capitalized Overhead (an allowance for utility overhead charges);
- 22           (d) Additional investment in the Customer Information System to
- 23           accommodate time-varying pricing (Staff Comments, p 6);
- 24           (e) Accelerated depreciation of the old meters (Staff Comments, p 7);
- 25           (f) Remote disconnect switches in the meters (Staff Comments, Potential
- 26           Benefit, p 12);
- 27           (g) In-home display of energy use and pricing data (Staff Comments,
- 28           Potential Benefit, p 12);
- 29           (h) Theft detection metering; or
- 30           (i) Contingency allowances.



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1           3.3   Exhibit C13-10 included a list which Mr. Shadrack described as “outlining the  
2                    attributed cost of installing some smart meters across North America”. The line  
3                    for Idaho Power Corporation referred to “\$141.80 (wired)”. Please reconcile the  
4                    reported \$141.80 per meter with Pike Research’s \$197 per meter (Exhibit B-23)  
5                    and the \$136 on page 6 of Order No. 30726 in Exhibit C13-17-1.

6   **4.0   Reference:   Exhibit C13-17-1, Item 16**

7           4.1   Please       confirm       that       the       following       news       release  
8                    (<http://news.verizonwireless.com/news/2011/06/pr2011-06-21w.html>) states the  
9                    following:

10                            BASKING RIDGE, NJ, and AUSTIN, TX — Verizon Wireless and Consert  
11                            Inc., an intelligent load management technology company, today  
12                            announced early results from smart grid pilot projects with Texas-based  
13                            Bluebonnet Electric Cooperative and Pedernales Electric Cooperative,  
14                            both of which are in partnership with the Lower Colorado River Authority.

15                            Consert utilizes Verizon Wireless’ reliable 3G and 4G LTE networks to  
16                            provide real-time communication from a consumer’s electric meter to the  
17                            Consert data center. This highly secure network delivers fast data  
18                            speeds and increased efficiencies for utilities.

19                            Designed to create a more reliable electric grid by offering real-time,  
20                            integrated load management through the pairing of utility and consumer  
21                            offerings, the Consert Virtual Peak PlantSM (VPP) Solution proved to be  
22                            effective in tests conducted during the state’s severe winter weather  
23                            events in February and high daily temperatures in May.

24                            As part of the pilot programs, both Bluebonnet and Pedernales utilized  
25                            the Consert VPP Solution to empower Central Texas residential and  
26                            small commercial members to actively monitor and control their energy  
27                            usage through a smart Home Area Network (HAN) installed at their  
28                            properties.

29                            “The utilities sector is a leader in implementing advanced wireless  
30                            technologies by leveraging smart energy grid tools such as the Consert  
31                            VPP Solution and the Verizon Wireless network,” said Anna Bailey,  
32                            director, sales, utilities and industrial, Verizon Wireless. “The real-time  
33                            communications advantage that Verizon Wireless provides is a significant  
34                            point of differentiation between Consert and its competitors’ capabilities.”

35

36                            How It Works

37                            Consert establishes a smart HAN on a consumer’s property by attaching  
38                            intelligent load measurement and control hardware to major energy



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1 consuming devices, such as heating and air conditioning systems, water  
2 heaters, and pool pumps, and utilizing programmable thermostats that  
3 communicate with a gateway module residing inside the electric meter.

4 Through Consert's proprietary software, pilot participants set daily energy  
5 use profiles, monitor their energy consumption, and authorize their  
6 electric cooperative to cycle their devices off for brief periods during peak  
7 energy consumption events.

8

9 Program Successes

10 Consert's load management system proved effective in tests during the  
11 severe winter weather Texas faced in February which resulted in record  
12 demands on the electric grid. Bluebonnet utilized the Consert VPP  
13 Solution to adjust pilot participants' device settings within the limits set by  
14 their personal energy profiles to run control events to reduce load.

15 During these control event tests which spanned eight hours, Bluebonnet  
16 was able to reduce load demand by approximately five kilowatts per pilot  
17 participant, with little or no noticeable impact to comfort levels. In  
18 addition, early results show that the Consert VPP Solution has measured  
19 and verified a reduction in energy consumption of up to 17 percent in  
20 some participating households.

21 "Our tests on Consert's technology during the winter load events showed  
22 the enormous potential of a load management program that benefits both  
23 consumers and utilities," said Mark Rose, Bluebonnet chief executive  
24 officer. "Consert's system reduced critical load as requested and  
25 provided real-time, measurable and verifiable results. When used on a  
26 broader scale, this technology will be another way for Texas utilities to  
27 address, and hopefully avoid, future outage scenarios."

28 Pedernales tested the Consert VPP Solution in May to determine the  
29 system's capabilities during pre-summer temperature days. During its  
30 control events, Pedernales was able to adjust pilot participants' device  
31 settings as permitted to reduce load and test member behavior to  
32 determine the optimum control event duration in kilowatt reduction to  
33 minimize participant opt-outs during control events.

34 "Consert's solution provides us with the opportunity to leverage energy  
35 consumption during times of peak while enabling our members to have  
36 control of their energy use," said R.B. Sloan, Pedernales chief executive  
37 officer. "This pairing of utility and consumer offerings is critical to  
38 enabling viable load management."



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1 Both pilot programs received great acclaim from residential and small  
2 business consumers who tested the Consert VPP Solution. Bluebonnet  
3 pilot participants surveyed expressed 100 percent satisfaction with the  
4 load management solution and 95 percent of those surveyed in  
5 Pedernales' pilot program shared their approval as well.

6 The success of Consert's pilot programs throughout the state also led to  
7 an announcement earlier in the week of the company's agreement with  
8 San Antonio-based CPS Energy that will result in the reduction of 250  
9 megawatts of peak demand over the next four years. Poised to relocate  
10 its corporate headquarters and senior leadership from Raleigh, N.C., to  
11 San Antonio in July, Consert will create over 150 jobs by 2014.

12 "These pilot programs were pivotal for Consert as we were able to  
13 demonstrate our proprietary technology to enable grid enhancements and  
14 member energy savings for Bluebonnet and Pedernales," said Jack  
15 Roberts, president and chief executive officer, Consert. "We are well  
16 positioned with our relocation to Texas to become an integral part of the  
17 state's future in the electric grid technology."

18

#### 19 Energy on a Reliable Network

20 The Consert VPP Solution operates over Verizon Wireless' 3G and 4G  
21 LTE networks which provide data to utilities in real-time enabling quick  
22 load projections and power usage management to effectively manage  
23 load resources.

24 Verizon Wireless offers wireless and wireline products and services that  
25 provide enterprise and government customers in a variety of industries  
26 with the networking capabilities they require to keep their organizations  
27 running at top speeds today and in the future.

28 Verizon Wireless and its Business Solutions Alliance provide leading  
29 wireless solutions to meet the challenges of the electrical utilities  
30 industry. Smart metering, distribution grid management and demand  
31 response applications backed by the Verizon Wireless network make  
32 smart grid solutions a reality for the utilities industry.

33 4.2 Please confirm that Pedernales Electric Cooperative, which previously installed  
34 a TWACS PLC system, has piloted wireless "3G and 4G LTE networks to provide  
35 real-time communication from a consumer's electric meter to the Consert data  
36 center."

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1    **5.0    Reference:    Exhibit C13-17-1, Item 24**

2            5.1    Please confirm that on p. 10 of 34 of the report attached as Item 19, it states  
 3            "Overall, Structure found that the AMI technology deployed by PG&E appears to  
 4            be 1) consistent with industry standards, based upon the goals of the AMI  
 5            implementation and upgrades approved by the CPUC, and 2) accurate from a  
 6            metering and billing perspective."

7            5.2    Please confirm or explain otherwise that PG&E, after initially starting to install  
 8            PLC smart meters, removed them and went to an RF advanced meter.

9            5.3    Please confirm that the AMI technology referred to on p. 10 of 34 of the report  
 10           attached as Item 19 were RF advanced meters.

11    **6.0    Reference:    Exhibit C13-17-1 Item 24 – Amended Declaration of Barry Trower,**  
 12    **AHM vs Portland Public Schools, United States District Court, District of Oregon,**  
 13    **Portland Division, December 21, 2011**

14           6.1    Please confirm that Mr. Trower’s Amended Declaration was filed by the Plaintiffs  
 15           in litigation between AHM, by and through her Guardian *ad litem* and father,  
 16           David Mark Morrison, and David Mark Morrison, individually, and Portland Public  
 17           Schools (the **AHM Litigation**).

18           6.2    Please refer to Attachment RDCK IR1 6.2, which is entitled Memorandum in  
 19           Support of Portland Public Schools’ Motion to Exclude or Strike Plaintiffs’ Expert  
 20           Reports (the Defendants’ Memorandum).

21           6.2.1   Please confirm that the Defendant in the AHM Litigation applied to strike  
 22           several declarations filed on behalf of the Plaintiffs including the  
 23           declarations of Mr. Trower, Curtis Bennett and David Carpenter.

24           6.2.2   Please confirm that the Defendants’ Memorandum stated at p. 29:  
 25           “Because Mr. Trower is not qualified to offer an expert opinion, and his  
 26           expert opinions are neither reliable nor relevant, his declaration and reply  
 27           declaration should be struck from the record”.

28           6.3    Please refer to (a) Attachment RDCK IR1 6.3(a), which is entitled Motion Hearing  
 29           Transcript of Proceedings Before the Honorable Michael W. Mosman, United  
 30           States District Court Judge, and (b) Attachment RDCK IR1 6.3(b), which is a  
 31           Judgment in the AHM Litigation dated July 24, 2012.

32           6.3.1   Please confirm that the AHM Litigation was dismissed with prejudice.

33           6.3.2   Please confirm that the AHM Litigation was dismissed by the United  
 34           States District Court because the RF levels emitted by the Portland Public  
 35           School Wi-Fi networks are below the limits established by the FCC.

36           6.3.3   Please confirm that the motions to strike were denied as moot.





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- 1    **13.0 Reference: McLennan C13-19, p. 4. “Those Wireless Internet Service Providers,**  
 2    **those community not-for-profit entities, who also provide service**  
 3    **within those ‘low-band’ frequency channels, are also complaining**  
 4    **about interference. Specifically, in both cases, the frequencies**  
 5    **between 902 and 928 Mhz.”**
- 6            13.1 Are the Wireless Internet Service Providers referred to alleging that they receive  
 7            interference from advanced meters engineered systems with suitable RF fade  
 8            margin?
- 9    **14.0 Reference: McLennan C13-19, p. 4. “Mhz stands for Million-hertz. Hertz is a**  
 10    **more recent term for cycles per second (cps). The higher frequency**  
 11    **bands are designated in Ghz . Ghz stands for Million Million-hertz.”**
- 12            14.1 Please confirm that MHz refers to megahertz.
- 13            14.2 Please confirm that GHz refers to gigahertz. Please confirm that 1 GHz equals  
 14            10<sup>9</sup> Hz (thousand million hertz).
- 15    **15.0 Reference: McLennan C13-19, p. 4. “The utilities are regulated on the basis of**  
 16    **return on investment on invested capital, or at least that is how it**  
 17    **was explained to me when I took economics courses at SFU**  
 18    **(Beneficial Monopoly). That is the way the aviation market was until**  
 19    **it was deregulated in the 1980s and 1990s.They could assume**  
 20    **practically any pricing and costing model desired to accommodate**  
 21    **high tariffs, knowing that under government regulation, profits**  
 22    **would follow.”**
- 23            15.1 Please state how the regulatory compact that applies to FortisBC allows “any  
 24            pricing and costing model desired to accommodate high tariffs”.
- 25    **16.0 Reference: McLennan C13-19, p. 5. “I do not believe it is necessary to use RF**  
 26    **energy at all. It is possible, based on the research I have done, and**  
 27    **more economically feasible, to use a wired connection between a**  
 28    **customer and the utility, no matter the system used by the utility.”**
- 29            16.1 Please provide Mr. McLennan’s research demonstrating that it is more  
 30            economical to use wired technology to read customer electric meters than  
 31            wireless technology when comparing wired and wireless systems with similar  
 32            functionality with respect to metering (including remote disconnect), bandwidth,  
 33            latency, and the ability to support other applications on the network.
- 34    **17.0 Reference: McLennan C13-19, p. 5. “Again, based on my research, all utilities**  
 35    **currently use a wired direct billing technology with large users,**  
 36    **specifically corporate users, of electrical power.”**
- 37            17.1 Please clarify what is meant by “wired direct billing technology”.

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- 1            17.2    Please provide evidence that all utilities use wired direct billing technology.
- 2            17.3    Please comment on the ongoing monthly costs to lease and service physical  
 3            optic fibre or copper wired system and whether this cost scales from a large  
 4            wholesale customer to an average residential user.
- 5    **18.0    Reference:    McLennan C13-19, p. 5. *“I do not believe that the current emphasis***  
 6            ***on the use of wireless smart meters is in fact warranted. It does***  
 7            ***nothing to balance the demand-supply equation. It does nothing to***  
 8            ***enhance the use of renewable resources such as wind or solar***  
 9            ***generation by the utility since large scale base-band energy***  
 10           ***production is the mean.”***
- 11           18.1    Please explain how wired technologies address the limitations that are purported  
 12           in this statement to be associated with wireless technologies.
- 13    **19.0    Reference:    McLennan C13-19, p. 5. *“There are a number of Spread Spectrums***  
 14           ***being used in the world. The first of these was the FHSS technology***  
 15           ***noted above, which is still produced today, although it is considered***  
 16           ***obsolete and an inefficient method of moving data.”***
- 17           19.1    Please confirm that FHSS technology is used in many currently manufactured  
 18           products, including Bluetooth devices, baby monitors, cordless phones and tens  
 19           of millions of smart grid devices.
- 20           19.2    Please confirm that usage of the word “inefficient” in the quoted passage is in  
 21           reference to the amount of data (bits) carried on a fixed bandwidth (Hz) and not  
 22           to other metrics which may be important to non-broadband users of the  
 23           spectrum.
- 24    **20.0    Reference:    McLennan C13-19, p. 6. *“FHSS was initially promoted as being***  
 25           ***totally secure and unhackable. That was true in the 1960s and 1970.***  
 26           ***That is not the case now. They may be difficult to intercept and***  
 27           ***decode, but not impossible now. A modern laptop with frequency***  
 28           ***capture capability could capture, scan and break the FHSS smart***  
 29           ***meter technologies within minutes.”***
- 30           20.1    Please confirm, as described in section 8.4.3 of the Application, that the FHSS  
 31           technique employed as part of the RF LAN technology ensures both security and  
 32           integrity of the data, and that additional security measures employed include the  
 33           use of dedicated Signing and Encryption System and Decryption and Key Update  
 34           System appliances, the use of Advanced Encryption Standard 128 bit key and  
 35           Elliptical Curve Cryptography 284 bit key, and the use of a Security Event  
 36           Manager to identify intrusions and attacks on the network?
- 37           20.2    Please explain in detail how a user with a modern laptop could capture, intercept  
 38           and subsequently decode transmissions from an FHSS smart meter that employs



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1 advanced authentication and authorization protocols for access to the network in  
2 addition to Head End System data encryption.

3 **21.0 Reference: Exhibit C13-17-1 Item 9**

4 21.1 Please confirm that the conclusion of the study was that FHSS provides only a  
5 minimal amount of security and should not be relied on as a security mechanism  
6 for RF networks.

7 21.2 If confirmed, what other measures can be utilized to achieve a suitable level of  
8 security?

9 21.3 Are use of dedicated Signing and Encryption System and Decryption and Key  
10 Update System appliances, the use of Advanced Encryption Standard 128 bit  
11 key and Elliptical Curve Cryptography 284 bit key, and the use of a Security  
12 Event Manager to identify intrusions and attacks on the network examples of  
13 suitable security measures that can enhance those already inherent in FHSS? If  
14 not, why not?

15 21.4 Please confirm that FortisBC is not only relying on frequency-hopping spread-  
16 spectrum for security but has stated including at p. 136 of Exhibit B-1 that it is  
17 also using encryption as recommended in the article attached in Item 9.

18 21.5 Please review Table 5.1b of Exhibit B-1 and confirm that Meter Reading savings  
19 exceed New Operating Costs.

**Bruce L. Campbell**  
**OSB No. 925377**  
bruce.campbell@millernash.com  
**Madeline Engel**  
**OSB No. 096283**  
madeline.engel@millernash.com  
MILLER NASH LLP  
3400 U.S. Bancorp Tower  
111 S.W. Fifth Avenue  
Portland, Oregon 97204-3699  
Telephone: (503) 224-5858  
Facsimile: (503) 224-0155  
Attorneys for Defendant Portland Public Schools

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,

Plaintiffs,

v.

**Portland Public Schools**,

Defendant.

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No. 3:11-CV-00739-MO

MEMORANDUM IN SUPPORT OF  
PORTLAND PUBLIC SCHOOLS'  
MOTION TO EXCLUDE OR STRIKE  
PLAINTIFFS' EXPERT REPORTS

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## INTRODUCTION

Plaintiffs have filed with the Court six declarations that are intended to serve as Fed. R. Civ. P. 26(a)(2) reports. Although the declarations purport to convey generally accepted scientific principles and opinions, they are not grounded in science. Instead, the declarations contain an array of untested theories and unsupported assertions on topics outside the declarants' fields of expertise. Rather than offering accepted scientific principles or opinions, the declarations represent fringe views that are directly at odds with scientific consensus. Because plaintiffs' declarations do not satisfy the requirements of Fed. R. Evid. 702 or *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), defendant Portland Public Schools ("PPS"), requests that the Court strike the declarations from the record.<sup>1</sup>

## BACKGROUND

In this case, plaintiffs allege that "Wi-Fi is genotoxic, carcinogenic, neurotoxic and [is] otherwise causing ongoing harmful adverse health effects to AHM, other school children, teachers, and staff." Second Amended Complaint ¶ 22. Based on these perceived harms, plaintiffs assert claims for violation of the Due Process Clause, 42 U.S.C. § 1983, and Title 45, the Public Welfare, part 46 (45 C.F.R. §§ 46.101-.124, 46.401-.409). Second Amended Complaint ¶¶ 26-33.

Plaintiffs support their claims with the declarations of six "expert" witnesses. Although there is some variability in their opinions, plaintiffs' experts state that it is "generally accepted" within the "relevant scientific community" that low-level radio-frequency ("RF") and microwave ("MW") emissions cause adverse health effects, and they opine that PPS's use of Wi-Fi will cause students, teachers, and others to suffer such effects. *See* Second Amended Declaration of Curtis Bennett ("Bennett Decl.") ¶¶ 15-16; Amended Declaration of Dr. David O.

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<sup>1</sup> PPS also moves to strike plaintiffs' experts' replies to PPS's expert report of David Savitz, Ph.D. Although the replies do not provide substantive support for plaintiffs' claims, PPS moves to strike them nonetheless because they are inadmissible under Rule 702 and *Daubert*.

Carpenter, M.D. ("Carpenter Decl.") ¶¶ 19, 23; Declaration of Dr. Andrew Goldsworthy, BSc, Ph.D. ("Goldsworthy Decl.") ¶ 42; Declaration of Dr. Magda Havas ("Havas Decl.") ¶ 51; First Amended Declaration of L. Lloyd Morgan ("Morgan Decl.") ¶¶ 35-36; Amended Declaration of Barrie Trower ("Trower Decl.") ¶¶ 89-90.<sup>2</sup> The experts also contend that the Federal Communication Commission's (the "FCC") exposure guidelines for RF emissions are too liberal and do not provide adequate protection against health risks. Carpenter Decl. ¶¶ 11, 34; Havas Decl. ¶¶ 3-4, 9, 11-12, 16-18; Morgan Decl. ¶¶ 12, 15.

Despite the experts' assertions that it is generally accepted that low-level RF and MW emissions cause adverse health effects, the leading health authorities on the issue have concluded that such emissions—particularly in the context of cell phones and Wi-Fi—have not been shown to be harmful. For example:

1. The National Cancer Institute at the National Institutes of Health states in a fact sheet that "[s]tudies thus far have not shown a consistent link between cell-phone use and cancers of the brain, nerves, or other tissues of the head or neck." Declaration of Bruce L. Campbell ("Campbell Decl."), Ex. 7, at 1. Further, "to date there is no evidence from studies of cells, animals, or humans that radiofrequency energy can cause cancer." *Id.* at 2. The National Cancer Institute fact sheet contains a comprehensive discussion of the leading research into the health effects of RF energy. *Id.* at 2-5.

2. The American Cancer Society recently summarized studies regarding an association between cell-phone use and cancer and concluded: "In summary, most studies published so far have not found a link between cell phone use and the development of tumors." Campbell Decl., Ex. 8, at 3. The American Cancer Society listed the findings of several expert agencies, which generally conclude that scientific research does not show an association between cell-phone use and health effects. *Id.* at 5.

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<sup>2</sup> The Bennett, Carpenter, Goldsworthy, Havas, Morgan, and Trower declarations are attached to the Declaration of Bruce L. Campbell ("Campbell Decl.") as Exhibits 1 through 6, respectively.

3. The Institution of Electrical Engineers Policy Advisory Group on the Biological Effects of Low-Level Electromagnetic Fields (the "Group") issued a position paper that "concluded that the balance of scientific evidence does not indicate that harmful effects occur in humans due to low-level electromagnetic field exposure." Campbell Decl., Ex. 9, at 1. The Group evaluated epidemiological studies, animal studies, and cellular studies, and concluded that each body of research failed to demonstrate any clear or obvious pattern of biological responses from exposure to electromagnetic fields. *Id.* at 3-6.

4. In December 2011, the U.S. Food and Drug Administration stated that the results of most studies to date indicate that there is no connection between exposure to RF fields through cell-phone use and health problems. Campbell Decl., Ex. 10, at 1. The FDA noted that although the World Health Organization (the "WHO") has classified RF fields as a "possible" carcinogen, coffee and talcum powder share that classification, which is the third of five categories that the WHO uses to classify substances. *Id.*

5. The National Toxicology Program of the National Institute of Environmental Health Sciences recently stated that "[t]he weight of the current scientific evidence has not conclusively linked cell phone use with any adverse health problems, but more research is needed." Campbell Decl., Ex. 11, at 1.

6. The International Commission on Non-Ionizing Radiation Protection ("ICNIRP") issued a statement on the guidelines for limiting exposure to electric, magnetic, and electromagnetic fields up to 300 GHz. Campbell Decl., Ex. 12, at 1. ICNIRP stated that, in its opinion, "the scientific literature published since the 1998 guidelines has provided no evidence of any adverse health effects below the basic restrictions and does not necessitate an immediate revision of its guidance on limiting exposure to high frequency electronic fields." *Id.* at 2. Further, "[e]pidemiological data on possible health effects of chronic, low-level, whole-body exposure in the far-field radiofrequency (RF) transmitters are poor, especially because of lack of

satisfactory individual exposure assessment. The few studies with adequate exposure assessment did not reveal any health-related effects." *Id.* at 3.

7. Health Canada has spoken directly to the claims that Wi-Fi exposure causes health harms. According to Health Canada, "there is no convincing scientific evidence that exposure to low-level radiofrequency (RF) energy from Wi-Fi causes adverse health effects in humans." Campbell Decl., Ex. 13, at 1. Health Canada also states that "the vast majority of scientific research to date does not support a link between RF energy exposure and human cancers" and that "[b]ased upon extensive peer-reviewed scientific evidence, Health Canada has determined that exposure to low-level RF energy, such as that from Wi-Fi equipment, is not dangerous to children. There is no conclusive evidence of any long-term or cumulative health risks from exposure to low-intensity RF energy." *Id.* at 4-5.

8. The FCC states that "[t]here is no scientific evidence that proves that wireless phone usage can lead to cancer or a variety of other problems, including headaches, dizziness or memory loss." Campbell Decl., Ex. 14, at 2. Speaking more generally to RF emissions, the FCC has declared that "[a]t relatively low levels of exposure to RF radiation, *i.e.*, levels lower than those that would produce significant heating; the evidence for production of harmful biological effects is ambiguous and unproven." Campbell Decl., Ex. 21, at 5.

9. The U.S. Environmental Protection Agency states that "[t]o-date, the scientific evidence linking long-term use of cell phones to cancer or other health effects is not conclusive. More research is needed to clarify the question of safety." Campbell Decl., Ex. 15, at 1.

The views expressed by the agencies is consistent with that of PPS's expert, Dr. David Savitz. Dr. Savitz is Professor of Epidemiology and Obstetrics and Gynecology at Brown University. Expert Report of Dr. David Savitz, Ph.D. ("Savitz Report") ¶ 1 (Campbell Decl., Ex. 16). He has been a professor of epidemiology since 1985 and has over 25 years of

experience in conducting and evaluating epidemiological research addressing the health effects of nonionizing radiation. *Id.* ¶¶ 2-5.

Dr. Savitz opines that "Wi-Fi in schools constitutes a distinctive pattern of exposure—the nature of the transmission, duration of exposure, age of the children, etc., are different than for other forms of non-ionizing radiation. Since this has not been directly evaluated in a scientific manner, assessment of the potential health consequences of exposure to Wi-Fi could be based only on extrapolation from research on other forms of non-ionizing and expert judgment regarding the applicability of those other circumstances to the issue of Wi-Fi in schools." Savitz Report ¶ 14. Dr. Savitz explains in detail why any such attempt to extrapolate is not reliable, including that the existing research does not support the conclusion that exposure to other forms of RF emissions is harmful. *Id.* ¶¶ 14.a-c, 23-24, 31-32.

## ARGUMENT

### A. Standard for Admissibility of Expert Testimony.

To be admissible, expert testimony must satisfy the standards set forth in the Federal Rules of Evidence and *Daubert*, 509 U.S. 579. The burden is on the proponent of the evidence to show that the expert testimony is admissible. *Lust v. Merrell Dow Pharm., Inc.*, 89 F.3d 594, 598 (9th Cir. 1996). Fed. R. Evid. 702 requires that expert testimony assist the trier of fact, be based on sufficient facts or data, be the product of reliable principles and methods, and apply the principles and methods reliably to the case.<sup>3</sup>

Further, under *Daubert*, "a district court must determine at the outset, pursuant to Fed.R.Evid. 104(a), 'whether the expert is proposing to testify to (1) scientific knowledge that

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<sup>3</sup> Rule 702 states: "If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case."

(2) will assist the trier of fact to understand or determine a fact in issue." *Gabbard v. Linn-Benton Hous. Auth.*, 219 F.Supp.2d 1130, 1133 (D. Or. 2002) (footnote omitted) (quoting *Daubert*, 509 U.S. at 592). *Daubert* requires that the "district court act[] as a "gatekeeper," excluding "junk science" that does not meet the standards of reliability required under Rule 702." *McKeown v. Paul Revere Life Ins. Co.*, No. 08-537-MO, 2009 WL 1491181, at \*2 (D. Or. May 26, 2009) (quoting *Domingo ex rel. Domingo v. T.K.*, 289 F.3d 600, 605 (9th Cir. 2002)).

The district court's "gatekeeper function is accomplished by assuring that the evidence is both relevant and reliable." *Id.* at \*3 (citing *Domingo*, 289 F.3d at 605). "Reliability is verified by assessing 'whether the reasoning or methodology underlying the testimony is scientifically valid.' Relevance is determined by ascertaining 'whether [that] reasoning or methodology properly can be applied to the facts in issue.'" *Gabbard*, 219 F.Supp.2d at 1133-34 (quoting *Daubert*, 509 U.S. at 592-93) (footnote omitted).

*Daubert* instructs district courts to assess the reliability of scientific testimony in light of four nondispositive factors: "(1) whether the scientific theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether there is a known or potential error rate; and (4) whether the theory or technique is generally accepted in the relevant scientific community." *Domingo*, 289 F.3d at 605 (citing *Daubert*, 509 U.S. at 593-94). And "if an expert did not conduct his or her own research, independent of the litigation, on the subject of the testimony, the district court must determine whether there exists any "objective, verifiable evidence that the testimony is based on scientifically valid principles." *McKeown*, 2009 WL 1491181, at \*3 (quoting *Domingo*, 289 F.3d at 605 (quoting *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1318 (9th Cir. 1995))).

"In assessing relevance, 'the district court must determine whether the methodology or reasoning underlying the expert opinion relates to the issue at hand, i.e., whether it assists the trier of fact in understanding the evidence or a fact in issue. In this regard, the *Daubert* Court discusses the concept of "fitness," that is, whether the expert testimony proffered

in the case is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute." *Gabbard*, 219 F.Supp.2d at 1134 n.9 (quoting *Joiner v. Gen. Elec. Co.*, 78 F.3d 524, 530 (11th Cir. 1996) (internal quotation marks and citations in *Joiner* omitted). *See also Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997) (noting that a court should exclude opinion evidence that "is connected to existing data only by the *ipse dixit* of the expert").

Rule 702 also requires that the expert be qualified "by knowledge, skill, experience, training, or education" in order to offer an expert opinion. A witness who does not possess the requisite knowledge, experience, or training in the field in which he or she is offering an opinion is not qualified to offer the opinion. *See, e.g., McKeown*, 2009 WL 1491181, at \*4 (physician with no particularized training in neurology or toxicology not qualified to offer medical opinion regarding neurology); *McCulloch v. H.B. Fuller Co.*, 981 F.2d 656, 657-58 (2d Cir. 1992) (upholding district court's exclusion of expert testimony as outside field of expertise).

Thus, "an expert's conclusion must meet the "trilogy of restrictions on expert testimony: qualification, reliability and fit."" *McClellan v. I-Flow Corp.*, 710 F.Supp.2d 1092, 1098-99 (D. Or. 2010) (quoting *In re Human Tissue Prods. Liab. Litig.*, 582 F.Supp.2d 644, 655 (D.N.J. 2008) (quoting *Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003))). As detailed below, plaintiffs' experts and declarations lack the qualifications, reliability, and fit necessary to render their opinions admissible.

**B. The Court Should Strike the Second Amended Declaration of Curtis Bennett.**

**1. Mr. Bennett is not qualified to offer his opinions.**

Curtis Bennett leads off his declaration by claiming to be the "world's foremost authority on applying infrared technologies at molecular levels," and that he is "committed to contributing to the overall improvement of the Earth's ecosphere by extending mankind's vision beyond the visible." Bennett Decl. ¶ 1.

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Mr. Bennett earned a degree from the Northern Alberta Institute of Technology in construction-engineering technology, focusing on building construction and design, and is a Canadian Interprovincial Journeyman Electrician. *Id.* ¶¶ 2-3. Mr. Bennett also claims to have completed an education in "engineering, magnetic fields, heat transfer, and electron flow," but fails to offer any particulars regarding that education, other than noting that it complements his extensive background "with a technology that allows us to see temperature beyond our visible spectrum." *Id.* ¶ 4.

Mr. Bennett has consulted for various entities on unspecified topics and has consulted regarding the vulnerability of Canadian ports. *Id.* ¶¶ 5-9. Mr. Bennett asserts that he made a presentation to Canada's Standing Committee on Health and cites to a webpage, but the webpage does not identify him as a witness or presenter. *Id.* ¶ 8. Mr. Bennett also claims to have made presentations to "Medical Doctors" regarding the dangers of RF emissions, but provides no details as to the content, scope, or frequency of these presentations. *Id.* ¶ 9.

Notably absent from Mr. Bennett's declaration is any education, training, experience, or knowledge that would qualify him to offer an opinion on the specific adverse health effects of Wi-Fi. Because Mr. Bennett has not met the standard set by Rule 702, he is not qualified to offer his ultimate opinion that "Portland Public Schools' use of WI-FI is causing and will continue to cause AHM . . . adverse health effects and should be discontinued immediately as a national and global emergency." *Id.* ¶ 16.

**2. Mr. Bennett's testimony is neither reliable nor relevant.**

Even if Mr. Bennett were qualified to offer an expert opinion as to the health effects of Wi-Fi or RF emissions in general, his testimony does not meet the reliability standard set forth in *Daubert*. He does not state whether his theory about the adverse health effects of RF emissions has been tested, whether it has been subjected to peer review and publication, or whether there is a known or potential error rate. *See Daubert*, 509 U.S. at 593-94. Although Mr. Bennett claims that his theory is generally accepted in the relevant scientific community,

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Bennett Decl. ¶ 15, he offers no support for this position.<sup>4</sup> In short, Mr. Bennett has not shown that "the reasoning or methodology underlying [his] testimony is scientifically valid." *Gabbard*, 219 F.Supp.2d at 1133 (internal quotation marks and citation omitted).

Mr. Bennett's declaration is also deficient because he fails to show that the methodology underlying his opinion has any application to Wi-Fi exposure. Even assuming that the studies cited in Mr. Bennett's declaration could be interpreted to show that RF emissions can be harmful, Mr. Bennett does not explain how those studies show that the Wi-Fi system in place at Mt. Tabor Middle School is harmful to students, staff, or faculty. Because Mr. Bennett's declaration fails all three prongs of the "trilogy of restrictions on expert testimony," *McClellan*, 710 F.Supp.2d at 1099, it should be struck from the record.

**C. The Court Should Strike the Amended Declaration and Amended Reply Declaration of Dr. David Carpenter**

Dr. David Carpenter is a public health physician and is currently the director of the Institute for Health and the Environment at the University of Albany. Carpenter Decl. ¶ 1. Dr. Carpenter attended Harvard Medical School and was the Dean of the School of Public Health at the University of Albany and the Director of the Wadsworth Center for Laboratories and Research of the New York State Department of Health. *Id.* In the 1980s, Dr. Carpenter served as the Executive Secretary to the New York State Powerlines Project, which directed research regarding the association between exposure to magnetic fields emanating from powerlines and childhood cancer. *Id.* ¶ 2.

Although Dr. Carpenter has had a distinguished career as a public health physician, he has limited experience in researching the health effects of RF or MW emissions. In his deposition, Dr. Carpenter admitted that he has not personally researched health hazards from nonionizing radiation, and that his experience consists of reviewing other people's work.

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<sup>4</sup> In fact, Mr. Bennett demonstrates that his views are out of the mainstream by criticizing "[a]cademia of the world [as being] literally blind to temperature." Bennett Decl. ¶ 9.

Deposition of David O. Carpenter ("Carpenter Dep.") at 29:10-13, 33:15-34:3, 57:20-58:23. And the majority of that experience occurred in connection with Dr. Carpenter's work with the New York Powerlines Project, which investigated effects from extremely low frequency emissions, rather than RF or MW emissions. *Id.* at 29:10-32:10, 58:14-20; Carpenter Decl. ¶ 2. Significantly, Dr. Carpenter has not performed any studies on the health effects of Wi-Fi or directed the research of others on the topic. Carpenter Dep. at 34:25-35:6.

Nevertheless, Dr. Carpenter concludes that Wi-Fi is harmful to human health, particularly in that it causes leukemia and other forms of cancer. *See* Carpenter Dep. at 78:3-7 ("But the major focus, the major reason I'm here to argue that Wi-Fi should be taken out of Portland Schools is my concern that it increases the risk of cancer."). *See also id.* at 76:12-20, 78:17-22. Dr. Carpenter arrives at this conclusion by looking at studies regarding different forms of RF or MW emissions, and then extrapolating their findings to Wi-Fi emissions. *Id.* at 156:4-157:9.

Dr. Carpenter first asserts that because Wi-Fi and cellular phones both operate at frequencies within the RF range of the electromagnetic spectrum, exposure from Wi-Fi is similar to that from cell phones, but more likely to cause adverse health effects given the longer exposure period. *See* Carpenter Decl. ¶ 7 ("Chronic, such as all-day school exposure, is more likely than short and intermittent exposure, such as cell phone use, to produce harmful health effects, and is likely to do so at lower exposure levels."). There are a number of serious flaws with this assertion. Apart from the fact that the weight of scientific authority shows no adverse health effects from cell-phone use, Dr. Carpenter has only a rudimentary understanding of Wi-Fi technology:

Q. What's the basis for [your] statement that [Wi-Fi exposes building occupants including children and adults constantly from both computers and infrastructure antennas]?

A. Well, I think that you don't have to be an engineer to know in a Wi-Fi environment you constantly have radiofrequency radiation. Otherwise, you

wouldn't be able to turn on your laptop. I don't know that that's anything more than my general understanding of what Wi-Fi is.

Carpenter Dep. at 61:20-62:10.

A. Obviously, if you're comparing a day in school versus a cell phone conversation a critical factor is how long you are on the cell phone, but the patterns of the microwave radiation with the modulation and all of these things I don't frankly understand terribly well, are such that a prolonged exposure in a Wi-Fi environment is going to result in more aggregate exposure than a brief cell phone conversation.

Q. Well, if you don't know the patterns very well then how can you make that determination?

A. What I'm saying is that the patterns aren't very important.

Q. How do you know?

A. Well, that's a fair question. Because I think the answer to that is that nobody has clearly studied differences on the patterns. There is not information. It may be that the patterns are important. On the basis of the information that we have there is no evidence that minor differences in patterns significantly influence the health outcomes.

Carpenter Dep. at 104:14-105:11.

Not only does Dr. Carpenter lack a sufficient understanding of Wi-Fi technology to offer a credible opinion as to its exposure characteristics, but his theory that longer-term Wi-Fi exposure is more harmful than shorter-term, more intense cell-phone exposure is merely an untested assumption:

Q. But in that sentence [in paragraph 8 of the Carpenter declaration] you state that chronic exposure presumably from Wi-Fi is more likely than short cell phone exposure to produce harmful effects?

A. That I am making the assumption which I think is very well justified that harmful effects of radiofrequency radiation is the integration of intensity of exposure as a function of time. And that most people are not on the cell phone for excessive periods of time, although that is not true for some teenagers. Sometimes it's not true for my wife, but that's not on a cell phone. But in any case I think that it's reasonable to conclude that a lower level of intensity of exposure for a longer period of time is going to lead to an aggregate exposure that's greater

than a brief cell phone conversation and that's what I am trying to say in that sentence.

Q. But that assumption has not been tested, has it?

A. That's correct. That has not been tested in the sense of health outcomes and of course what's not specified in that sentence is how long the cell phone conversation is, but I think there is every rational justification to that conclusion."

Carpenter Dep. at 63:11-64:15.

Q. So the differences created by different patterns [of exposure] is not an issue that's been studied?

A. It's certainly not been studied with cancer in humans as the outcome. The reality is that the studies on which I'm basing my evidence of concern, that being cell phone studies for brain cancer, leukemia from radio, TV and to some degree cell phone towers, in all of those studies individuals are exposed to complex patterns and there is not adequate information to say that this particular pattern is what is more important than other components of it. So, yes, patterns may be important, but we don't have adequate information to identify how they are important.

Q. So in that statement you state that you believe that the health effects from WI-FI are actually worse than for cell or cordless phones; is that correct?

A. I'm saying that I believe that the health effects of WI-FI for long-term chronic exposure are worse than, and what's missing in that statement is brief exposure to cordless or cell phones. Now, of course if you spend ten hours a day on your cell phone you are going to have a higher aggregate exposure than if you spend ten hours a day in a WI-FI environment. But just because the intensity of the radiofrequency exposure at any one point in time is much less in a WI-FI environment than a cell phone does not in any way on the basis of the scientific evidence that there is indicate that the WI-FI environment is less hazardous.

Q. But again that's a point that has not yet been studied; has it?

A. Correct.

Carpenter Dep. at 105:12-107:1.

Dr. Carpenter also contends that Wi-Fi exposure is harmful because it is similar to exposure from radio and TV transmission towers, which have been found to cause cancer. *See* Carpenter Decl. ¶ 15 ("like WI-FI, radio-TV transmission towers give continuous, whole-body

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radiation, not just radiation to the head, constantly"); Carpenter Dep. at 81:7-83:19. As with Dr. Carpenter's effort to analogize cell-phone use to Wi-Fi exposure, his theory that transmission tower studies are applicable to Wi-Fi is based on a vague understanding of the two technologies and has not been tested:

Q. What is the power at which a radio transmission tower emits energy?

A. I can't answer that off the top of my head. I mean the papers describe that. These are powerful stations. So they are strong stations, but again you have the dose dependent elevations. So the elevations in cancer and leukemia were seen at significant distances from those transmission towers. . . . Now, that elevation in risk may not be sufficient always such that one can measure it in an epidemiological study. Epidemiology is basically a not very sensitive method, but I am concluding on the basis of the evidence that's available that if there is elevated leukemia in a dose dependent fashion around AM radio transmission towers there will be elevated leukemia as a function of dose as a function of WI-FI in schools.

Q. That theory as applied to Wi-Fi has not been tested; has it?

A. There have been almost no studies of WI-FI. I don't regard that as a theory. I regard that as a logical extension of what has been experimentally demonstrated in terms of human health and radiofrequency exposure.

Q. Well, let me use your terminology then. The logical extension that you are referring to specifically that WI-FI would result in an elevation of childhood leukemia and other cancers has not been tested; has it?

A. To my knowledge nobody has demonstrated elevated childhood leukemia as a result of only Wi-Fi exposure, but that's because the studies haven't been done. The other point is that while studies have not been done, one certainly cannot say that there is any evidence that it's safe.

Carpenter Dep. at 83:11-85:7.

Q. Looking at Paragraph 16 of your declaration you state since WI-FI transmitters, both infrastructural and on computers, are indoors, where children and teachers may be close by, and since it deploys wavelength more absorbable by children's and adults' bodies and brains than radio-TV wavelengths, the harmfulness of WI-FI radiation likely exceeds that of radio-TV towers. Again that theory or logical extension or whatever you want to refer to it as has not been tested; has it?

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A. That's correct.

Q. And you are not offering an opinion as a physicist or an electrical engineer about the difference between WI-FI wavelengths and TV-radio wavelengths?

A. That's correct.

Carpenter Dep. at 88:14-89:7.

Q: And I believe in the video you said we should take WI-FI out of schools not because we have proof, but because we don't have any proof that it's safe?

A: Correct.

Q: Do you stand by that statement?

A: I do indeed. The statement was that we don't have proof specifically on WI-FI. It was not referring to overall exposure to radiofrequency radiation.

Q: Well, in your statement you say we don't have proof that WI-FI is harmful, but we don't have proof that it's safe?

A. That's correct.

Q. And that's a statement you embrace today?

A. I stand by that statement. But again that refers to no specific studies of WI-FI in schools on human health. It does not—the statement that we should take WI-FI out of schools is because of the weight of the evidence on radiofrequency radiation in other settings, the ones I've talked about.

Q. Specifically cell phones?

A. Cell phones, transmission towers.

Q. And from those two—

A. Extrapolating to WI-FI.

Carpenter Dep. at 156:7-157-9.

Based on his testimony, it is evident that Dr. Carpenter's theory that Wi-Fi causes adverse health effects does not meet the standards for reliability articulated in *Daubert*. As the court observed in *Gabbard*, the first *Daubert* factor—whether the scientific theory or technique can be and has been tested—is the cornerstone for scientific inquiry. *See Gabbard*,

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219 F.Supp.2d at 1135 ("The first question is really the foundation for scientific inquiry in general: has a given theory been tested to show that, indeed, the hypothesized condition or relationship exists?"). Given that Dr. Carpenter's theories have not been tested by anyone, the theories do not satisfy any of the remaining factors articulated in *Daubert*, including whether the theories have been peer-reviewed, whether there is a known or potential error rate, or whether the theories are generally accepted in the relevant scientific community.

If the lack of reliability alone were not enough to render Dr. Carpenter's testimony inadmissible under Fed. R. Evid. 702, his statements show that he has shed all vestiges of objectivity and is appearing as an advocate with a defined agenda. Throughout his declarations and deposition testimony, Dr. Carpenter is unabashed in stating that it is his mission to remove Wi-Fi from schools. *See, e.g.*, Carpenter Dep. 78:3-7 ("But my major focus, the major reason that I'm here to argue that Wi-Fi should be taken out of Portland Schools is my concern that it increases the risk of cancer."); *id.* at 92:2-5 ("I consider my job to do what I can to prevent disease even as in the case with WI-FI in schools there is—there has been almost no study specifically of WI-FI in schools."); Carpenter Decl. ¶ 36 ("WI-FI must be banned from school deployment.").

When, as here, an expert witness crosses the line from providing scientific or technical expertise to becoming an advocate, courts give even greater scrutiny to that witness's opinions and have ruled that the testimony is inadmissible. *See, e.g., Kirk v. Raymark Indus.* 61 F.3d 147, 164 (3d Cir. 1995) ("[D]espite the fact that one party retained and paid for the services of an expert witness, expert witnesses are supposed to testify impartially in the sphere of their expertise."); *In re Trasyol Prods. Lia. Litig.*, 709 F.Supp.2d 1323, 1351 (S.D. Fla. 2010) (granting defendant's motion to exclude expert report because expert "is an advocate, presented with the trappings of an expert but with no expectation or intention of abiding by the opinion constraints of Rule 702"); *Selvidge v. United States*, 160 F.R.D. 153, 156 (D. Kan. 1995) ("An expert witness should never become one party's expert advocate."); *English Feedlot, Inc. v.*

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*Norden Labs., Inc.*, 833 F. Supp. 1498, 1501 (D. Colo. 1993) ("Experts are not advocates in the litigation but sources of information and opinions.").

While it may be appropriate for a public health official such as Dr. Carpenter to publicly advocate for precautionary measures without supporting science, he is not excused from the strictures of Fed. R. Evid. 702 and *Daubert* when he seeks to offer expert testimony in the federal courts. Because Dr. Carpenter's theories regarding the health effects of Wi-Fi fall well short of the standard necessary for admissibility, the Court should strike the declaration and reply declaration of Dr. Carpenter.

**D. The Court Should Strike the Declaration of Dr. Andrew Goldsworthy.**

**1. Dr. Goldsworthy is not qualified to offer his expert opinion.**

Dr. Andrew Goldsworthy is a botanist. He obtained his undergraduate degree in botany in 1960 and his Ph.D. in carbohydrate biochemistry in plants in 1964. Goldsworthy Decl. ¶ 1; Deposition of Andrew Goldsworthy ("Goldsworthy Dep.") at 11:8-22, 12:8-11. The thesis topic for his Ph.D. was the carbohydrate nutrition of tomato roots. Goldsworthy Dep. at 157:14-16. After receiving his Ph.D., Dr. Goldsworthy became an assistant professor and then full-time professor at Imperial College London, where he taught for approximately 40 years. Goldsworthy Decl. ¶ 2; Goldsworthy Dep. at 157:17-20.

During his career, Dr. Goldsworthy published numerous peer-reviewed articles about certain environmental effects on plant cells. Goldsworthy Dep. at 157:21-158:3. None of Dr. Goldsworthy's articles address effects on human cells, *id.* at 158:5-8, and he has never studied environmental effects on human cells. *Id.* at 102:10-18, 158:5-8, 160:8-12. *See* Goldsworthy Dep. at 24:16-23 ("Q Have you performed any personal investigations into the health effects of microwave or radiofrequency on humans? A. No, I have not. Q. So, have you performed any personal investigation on the health effects of Wi-Fi on humans? A. No, I have not."). Dr. Goldsworthy derives all his conclusions about the effect of electromagnetic frequency ("EMF") on human cells from reading others' work. *Id.* at 79:3-8.

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Despite his lack of experience, Dr. Goldsworthy contends that Wi-Fi emissions are harmful to humans. Goldsworthy Decl. ¶ 42. He bases this contention on his theory that EMF emissions cause cellular harm to plants and vegetables, and therefore would cause similar harm to human cells and human DNA. Goldsworthy Dep. at 31:19-25, 47:21-48:1. In his declaration, Dr. Goldsworthy predicts dire consequences for the human race if Wi-Fi is not eradicated:

Such DNA damage can cause a loss of fertility and an increased risk of getting cancer and in some cases, could lead to abnormalities in future generations. Most of the studies have been based on epidemiology since it is unethical to do controlled experiments on humans. *The human genome, which has taken countless millions of years to evolve, is now under a very serious threat.* We are talking about the future of our society.

Goldsworthy Decl. ¶ 37 (emphases in original).

Dr. Goldsworthy may be qualified to offer an expert opinion about the effects of EMF on plant cells, but he is not qualified to offer an expert opinion on the effects of EMF or Wi-Fi on humans. *See McKeown*, 2009 WL 1491181, at \*4 (holding plaintiffs' expert testimony inadmissible because "even though he is himself a physician, [his testimony] is not admissible as an expert opinion in the realm of neurology or toxicology"). Since Dr. Goldsworthy has never performed any studies on the effects of EMF on human cells, the only knowledge he has about those effects is from studies conducted by other people. Goldsworthy Decl. at 159:15-22 ("[V]irtually all of the material I have used to derive my conclusion has come from peer-reviewed material. All I have done is join the dots. I take no credit for it."). This does not qualify him as an expert. *See Edmons v. Home Depot, U.S.A., Inc.*, No. 09-987-AC, 2011 WL 127165, at \*6 (D. Or. Jan. 14, 2011) ("[T]hat a proffered expert witness has reviewed the work of an expert in a particular field prior to testifying does not render the proffered expert witness qualified to so testify."). Dr. Goldsworthy is not qualified to offer expert testimony in this case.

**2. Dr. Goldsworthy's expert opinion is neither reliable nor relevant.**

The premise of Dr. Goldsworthy's theory is that if Wi-Fi makes plant cells leak, it must have the same effect on human cells. Goldsworthy Dep. at 31:19-25, 47:21-48:1. All the scientific research conducted by Dr. Goldsworthy and contained in his declaration pertains solely to his research on plant cells and his review of others' studies. *See id.* at 158:5-8.

Q So initially—your initial conclusions about cellular leakage were based on plant studies.

A Yes.

Q Now, at some point, then, since you've retired from your post at Imperial College, you have reviewed studies of other people.

A Yes.

Q And it is those studies combined with what you have learned from plants that leads you to your conclusion?

A That is correct.

Goldsworthy Dep. at 159:12-22.

Dr. Goldsworthy makes the analytical leap from effects on plant cells to effects on human cells, *id.* at 49:11-16, 95:1-3, even though he admits that no research has ever been done on the effect of Wi-Fi on the fertility of women, *id.* at 62:9-18, nor has any research ever been done on the effect of Wi-Fi on children. *Id.* at 82:12-19, 101:16-24. Additionally, the only direct support for Dr. Goldsworthy's statements about the possible harm to humans from Wi-Fi consists of anecdotes from people he has spoken to who believe they have been affected by Wi-Fi. *See* Goldsworthy Decl. ¶ 8; Goldsworthy Dep. at 94:1-16. Simply stated, the analytical gap between Dr. Goldsworthy's research on plant cells and the effect of EMF of human cells is too wide and unsupported to be reliable. *See Joiner*, 522 U.S. at 146 (1997) ("A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.").

Furthermore, Dr. Goldsworthy's expert opinion is suspect because he is appearing as an advocate, not an objective expert witness:

Q And that's why you're testifying here today, isn't it?

A Yes.

Q You want to stop more—you want to stop the Portland Public Schools from having wi-fi in their schools.

A Because they have an alternative which is probably cheaper than taking this case to court.

Q But you want to stop them from having wi-fi in their schools, isn't that correct?

A I want them to remove the wi-fi and substitute it with a safer alternative, which is relatively cheap.

Goldsworthy Dep. at 164:20-165:6. As the Third Circuit explained: "[E]xpert witnesses are supposed to testify impartially in the sphere of their expertise." *Kirk*, 61 F.3d at 164.

Accordingly, district courts have found expert reports to be inadmissible when they demonstrate that the expert is an "advocate" rather than an impartial witness. *See, e.g., Trasyol*, 709 F.Supp.2d at 1351 (excluding expert report because expert "is an advocate, presented with the trappings of an expert but with no expectation or intention of abiding by the opinion constraints of Rule 702"). *See also Selvidge*, 160 F.R.D. at 156 ("An expert witness should never become one party's expert advocate."); *English Feedlot, Inc.*, 833 F. Supp. at 1501 ("Experts are not advocates in the litigation but sources of information and opinions.").

Dr. Goldsworthy's testimony reveals that he lacks a foundation for his opinion. Rather than appearing as an objective scientist within his field of expertise, Dr. Goldsworthy is advocating for an outcome that he desires. Because his declaration does not meet the requirements of Rule 702, the Court should strike it.

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**E. The Court Should Strike the Declaration and Amended Reply Declaration of Dr. Magda Havas.**

**1. Dr. Havas is not qualified to offer her expert opinion.**

Dr. Magda Havas received her undergraduate degree from the University of Toronto in biology and her Ph.D. in environmental toxicology with a focus on acid in alkaline lakes in the Canadian Arctic. Deposition of Magda Havas ("Havas Dep.") at 8:25-10:25. Dr. Havas then did postdoctoral research at Cornell University, studying the effect of aluminum toxicity on aquatic invertebrates. *Id.* at 11:9-18. In 1989, Dr. Havas accepted a position at Trent University teaching environmental education and environmental resource studies, and has been at Trent University ever since. *Id.* at 17:15-18:22, 19:18-20. As Dr. Havas testified, she is not qualified to offer an expert opinion on the health effects of Wi-Fi:

Q. And you are not a physicist, are you?

A. No.

Q. Nor are you an electrical engineer?

A. Correct.

Q. You are not an epidemiologist?

A. Correct.

Q. You're a biologist?

A. Correct.

Q. . . . [A]nd one other question: You have not studied the effect of Wi-Fi radiation on humans?

A. Correct.

Havas Dep. 121:6-18.

Dr. Havas has never conducted any studies on the health effects of Wi-Fi. Havas Dep. at 79:24-80:2, 121:15-18. The "closest" study Dr. Havas has conducted was on the effects of EMF from a cordless phone placed near the heads of participants who had specifically

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volunteered for the study. Havas Decl. ¶¶ 33-36; Havas Dep. at 64:25-65:10. As Dr. Havas acknowledged, the participants in the study were not representative of the general population. Havas Dep. at 71:14-20. Dr. Havas concluded that the study simply "documents that some individuals are hypersensitive to specific frequencies, and supports reports that people make when they are exposed to RF/MW radiation." Havas Decl. ¶ 35.

Dr. Havas does not have the education, experience, or training to offer her expert opinion, and her expert declaration and reply declarations should therefore be struck.

**2. Dr. Havas's testimony is neither reliable nor relevant.**

Dr. Havas's theories and expert opinions deviate so substantially from the weight of accepted scientific authority that they are neither reliable nor relevant. To illustrate, Dr. Havas shares her beliefs about Wi-Fi through many forums, including a YouTube channel, over which she has total control. Havas Dep. at 94:14-16. On her YouTube channel, Dr. Havas posted a PowerPoint presentation she created entitled "Conspiracy Theory: Population Control and Microwave Radiation," Campbell Decl., Ex. 20, in which she explains her belief that "there is a link between microwave radiation and population control." Havas Dep. at 222:11-224:15. The presentation explains that an "elite few" are attempting to control the global population by exposing the entire population to Wi-Fi, which, among other effects, causes men and women to become infertile and causes women to miscarry current pregnancies. Campbell Decl, Ex. 20.

Dr. Havas acknowledges that "there is very little research going on in the United States and Canada on any of this." Havas Dep. at 253:13-15. Therefore, Dr. Havas bases her opinions on cell-phone studies, not Wi-Fi studies:

Q Does Wi-Fi exposure at the Portland Public Schools create adverse health effects? . . .

A It's definitely possible.

Q Will it create adverse health effects?

A That's a question I can't answer. The other question you can ask me, it is probable, and I would say yes. Unfortunately, it is probable.

Q What's the basis for your assertion that it's probable?

A All the other studies that have been done that have shown adverse effects for people who are exposed to this radiation, this type of radiation.

Q And the other studies are cell phone studies?

A Mostly cell antenna studies.

Havas Dep. 179:10-180:8.

Dr. Havas believes the results from the cell-phone studies would be the same as the results from Wi-Fi studies because both cell phones and Wi-Fi operate at 2.45 gigahertz. Havas Dep. at 273:23-275:2. Based on this scientifically unsupported correlation, Dr. Havas makes statements such as:

Established adverse biological outcomes of RF and MW radiation exposure (power density) levels below the FCC guideline include, without limitation, the increased permeability of the blood brain barrier, nerve damage, alterations in calcium efflux kinetics, increased DNA breakage, induced stress proteins, decreased immune-protection markers, and—at the whole-body level—cognitive and sleep impairments, headaches, dizziness, weakness, tinnitus, cardiac irregularities, hormonal and reproductive aberrations, skin dermatitis, reproductive problems, cancer and more.

Havas Decl. ¶ 12.

Dr. Havas's opinions, which are not based on studies involving Wi-Fi, are neither reliable nor relevant. Because Dr. Havas's opinions deviate dramatically from the weight of scientific authority, are not supported by scientific evidence, and are based on studies that do not involve the health effects of Wi-Fi, the Court should strike Dr. Havas's expert declaration and reply declaration.

**F. The Court Should Strike the Amended Declaration and Amended Reply Declaration of Lloyd Morgan.**

**1. Mr. Morgan is not qualified to offer his opinions.**

Lloyd Morgan is an electrical engineer. He earned a bachelor's degree in electrical engineering and worked as an industrial electrical engineer for 38 years until he retired in 2002. Morgan Decl. ¶¶ 1-2. Mr. Morgan has no formal training in biology or any other medical discipline. Deposition of Lloyd Morgan ("Morgan Dep.") at 43:6-10. Likewise, Mr. Morgan has no formal training in epidemiology. *Id.* at 41:19-42:10. Although Mr. Morgan regards himself as being "quite accomplished" in the field of epidemiology, he points to his employment experience as providing the foundation for his understanding of epidemiology. *See id.* at 42:8-17 ("I did have a lot of statistics in my work life, and essentially epidemiology is a combination of statistics and data.").<sup>5</sup>

In his declaration, Mr. Morgan states the he coauthored two "published, peer-reviewed, epidemiological papers." Morgan Decl. ¶ 7. One of those papers described an investigation into a supposed cancer cluster in a California school allegedly caused by "dirty electricity." Morgan Dep. at 29:3-30:18. The other studied associations between cell-phone use and brain tumors, but Mr. Morgan's role was limited to compiling and analyzing tables of data. *See* Morgan Dep. at 41:15-21 ("Q. Is it fair to say that your role with Dr. Hardell, as before with the California study, was to analyze data? A. Yes."). Mr. Morgan admits that he has not studied the health effects of Wi-Fi. Morgan Dep. at 56:17-19.

Despite these limitations in education, training, and experience, Mr. Morgan opines that "Portland Public Schools' use of WI-FI is causing and will continue to cause other students, school staff and faculty adverse health effects and must be discontinued immediately."

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<sup>5</sup> In fact, epidemiology is "a science that deals with the incidence, distribution, and control of disease in a population." Webster's Third New International Dictionary at 762 (2002). *See also* Savitz Report ¶ 10 ("Epidemiology is the scientific discipline that examines the patterns of disease in human populations in order to identify causes and methods of disease prevention.").

Morgan Decl. ¶ 36. Mr. Morgan simply lacks the expertise to offer such an opinion. He has no formal training in any of the disciplines that would qualify him to offer an opinion regarding the health effects of Wi-Fi, and his experience is too shallow to make up for the lack of education or training in these fields.

Rather than being an objective scientist, Mr. Morgan reveals by his declaration and deposition testimony that he is an ardent advocate against technologies that emit RF or MW energy. Mr. Morgan contends that the FCC exposure limits for RF energy are "harmful" and "based on a false premise" and attacks the agency itself as lacking authority to issue safety standards. Morgan Decl. ¶¶ 12, 15, 17; Morgan Dep. at 228:20-229:5. Mr. Morgan dismisses the views of the National Cancer Institute, American Cancer Society, and other leading health authorities on RF emissions as being "dishonest," or biased by industry connections. Morgan Dep. at 182:2-19, 189:20-190:10, 212:8-17. In fact, Mr. Morgan goes so far as to accuse the FCC of being a "captured agency" that views "their customer as the telecommunications industry." *Id.* at 185:16-187:24. Mr. Morgan is affiliated with several organizations that advocate that "environmental problems exist and something needs to be done about them." *Id.* at 68:11-18. Indeed, Mr. Morgan testified that he has always found an adverse health effect whenever he has investigated an area of concern. *See id.* at 62:13-16 ("Have you ever investigated an area of concern and found that it didn't produce an adverse health effect? A. No.").

In summary, Mr. Morgan has not shown that he possesses the requisite knowledge, skill, experience, training, or education to offer an expert opinion regarding adverse health effects of Wi-Fi. This lack of qualifications—especially when coupled with Mr. Morgan's role as an advocate—renders him unfit to offer an expert opinion under Rule 702. The Court should exclude his declaration and reply declaration.

**2. Mr. Morgan's testimony is neither relevant nor reliable.**

Even if Mr. Morgan were qualified to offer an expert opinion as to the health effects of Wi-Fi or RF emissions in general, his opinion does not satisfy the requirements for reliability set forth in Rule 702 and *Daubert*. To support his opinion that Wi-Fi causes adverse health effects, Mr. Morgan theorizes that because Wi-Fi is a form of MW emissions like cell phones and transmission towers, studies regarding cell phones, transmission towers, or other forms of MW emissions are directly applicable to Wi-Fi. Morgan Dep. at 137:3-141:15. In other words, Mr. Morgan offers the same untested theory advanced by Dr. Carpenter. Like Dr. Carpenter, Mr. Morgan offers no support for this view apart from his assertion that it is true because he says so. *See Joiner*, 522 U.S. at 146 (court should exclude opinion evidence that "is connected to existing data only by the *ipse dixit* of the expert"). Because Mr. Morgan's untested theory lacks scientific support, it falls well short of the standard for admissibility.

Although Mr. Morgan does cite two Wi-Fi studies in his declaration, Morgan Decl. ¶¶ 24d, 30j, those studies do not support the conclusion that Wi-Fi causes adverse health effects. The first study tested whether exposure to a laptop computer connected wirelessly had any effect on sperm motility. Conrado Avendano, et al., *Use of Laptop Computers Connected to Internet Through Wi-Fi Decreases Human Sperm Motility and Increases Sperm Fragmentation, Fertility and Sterility* 1 (2012) (Campbell Decl., Ex. 23). Based on a sample size of 29 semen donors, the authors concluded, "We speculate that keeping a laptop connected wirelessly to the internet on the lap near the testes may result in decreased male fertility. Further in vitro studies are needed to prove this contention." *Id.* at 1.

The second study purported to measure the effect of Wi-Fi emissions on attention and working memory. Charalabos C. Papageorgiou et al., *Effects of Wi-Fi Signals on the P300 Component of Event-Related Potentials During an Auditory Hayling Task*, 10 *Integrative Neuroscience* at 198 (2011) (Campbell Decl., Ex. 24). That study tested 15 male and 15 female subjects and found that brain function decreased for males but increased for females after Wi-Fi

exposure. The authors noted that "[t]hese contradictory findings are hard to explain." *Id.* at 198. Even Mr. Morgan did not attach much weight to this study, stating that the gender differences were likely attributable to the small sample size. Morgan Dep. at 125:18-126:19, 133:16-134:5.

Given their admitted limitations, neither the Avendano nor the Papageorgiou study adds support to Mr. Morgan's theory that Wi-Fi exposure is harmful to human health. As with Dr. Carpenter's theory, Mr. Morgan's theory fails to meet the standards for admissibility under Rule 702 and *Daubert*. Although Mr. Morgan claims that his theory has gained general acceptance in the relevant scientific community, Morgan Decl. ¶ 35, that assertion is belied by the positions of the leading health authorities, who uniformly state that there is no proof that RF emissions are harmful. *See* Campbell Decl., Exs. 7-16; Savitz Report ¶ 14.b (citing authorities). When, as here, "an expert opinion . . . *actually contradicts directly* the scientific consensus," the opinion "is inadmissible." *O'Conner v. Commonwealth Edison Co.*, 807 F. Supp. 1376, 1398 (C.D. Ill. 1992), *aff'd*, 13 F.3d 1090 (7th Cir.), *cert. denied*, 512 U.S. 1222 (1994).

Mr. Morgan's declaration and reply declaration fail to overcome any of the "trilogy of restrictions on expert testimony." *McClellan*, 710 F.Supp.2d at 1099. As a consequence, the Court should strike the declarations.

**G. The Court Should Strike the Declaration and Reply Declaration of Barrie Trower.**

**1. Mr. Trower is not qualified to offer his opinions.**

Barrie Trower gained all his formal education on MW emissions from military school, which he attended from age 15 to 17. Trower Decl. ¶ 1; Deposition of Barrie Trower ("Trower Dep.") at 22:12-13, 26:15-23. Mr. Trower graduated from military school in 1960 and has not received formal education in MW emissions since. Trower Dep. at ¶ 23:4-5, 22-23, 24:4-5. In 1984, Mr. Trower earned his first undergraduate degree in physics and then earned another undergraduate degree in research. Trower Decl. ¶ 3; Trower Dep. at 37:2-4, 39:6-8. Thereafter, Mr. Trower taught the American equivalent of high school physics. Trower Decl. ¶ 3; Trower Dep. at 43:22-44:3. Since retiring from teaching in 2003 or 2004, Mr. Trower has

been reviewing other people's writings and speaking about the conclusions he draws from those writings. Trower Dep. at 47:14-20, 64:8-19. He has never conducted his own research or testing. *Id.* at 63:22-24, 64:8-15. As he explained:

Q So it's fair to say that you've done no studies on the—lab or human studies on the health effects of Wi-Fi?

A No, sir.

Q And, again, your conclusions in the area are drawn from theory; is that a—

A My conclusions overall are drawn from published research papers.

Q Okay, so you've looked at the research papers published by others and then drawn conclusions based on those papers?

A Yes, sir.

Trower Dep. at 64:8-19.

Nothing in Mr. Trower's education or background indicates that he is qualified to offer an expert opinion about the health effects of Wi-Fi on children. His training at the military academy in the late 1950s and his undergraduate degrees do not qualify him to offer opinions about epidemiology, biology, or medicine. *See McKeown*, 2009 WL 1491181, at \*4 (holding plaintiffs' expert testimony inadmissible because "even though he is himself a physician, [his testimony] is not admissible as an expert opinion in the realm of neurology or toxicology"). Nor does Mr. Trower's review of other people's work qualify him to offer an expert opinion. *See Edmons*, 2011 WL 127165, at \*6 ("[T]hat a proffered expert witness has reviewed the work of an expert in a particular field prior to testifying does not render the proffered expert witness qualified to so testify."). Appropriately, Mr. Trower has never testified as an expert witness in court, Trower Dep. at 20:17-19, and he is not qualified to do so in the present case.

**2. Mr. Trower's testimony is neither reliable nor relevant.**

Mr. Trower's testimony also is inadmissible because it does not meet *Daubert's* reliability and fit requirements. Mr. Trower makes broad assertions regarding the effects of MW

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emissions, but offers no support for his conclusions. *See, e.g.*, Trower Decl. ¶ 23. Mr. Trower then correlates the effects of MW emissions to Wi-Fi without offering any scientific support or explanation why such a correlation is reliable:

The paradox of course is how microwave radiation can be used as a weapon to cause impairment, illness and death and at the same time be used as a communications instrument. Therefore, WI-FI cannot be safe for school children and teachers exposed to it.

Trower Decl. ¶ 18. Based on Mr. Trower's scientifically unsupported correlation between MW emissions and Wi-Fi, Mr. Trower contends that Wi-Fi will cause

arrhythmia, heart attack, cell death, diseases of the blood, interference to bone marrow, brain tumours, DNA damage, altered calcium levels in cells, reduction in night-time melatonin, suppression of the immune system, arthritis, rheumatism, skin problems, lymphatic diseases, vaginal discharge, vascular system disease, tinnitus, leukaemia, childhood cancer, sleep problems, mental problems including depression, irritability, memory loss, difficulty in concentrating, headache, dizziness and fatigue, suicidal tendencies, miscarriage and infertility.

Trower Decl. ¶ 23.

Moreover, as stated above, Mr. Trower bases his expert opinions solely on work prepared by others, but the work he cites is itself unreliable. First, there is no indication whether the studies he cites have been tested, which is a fundamental requirement of *Daubert*. *See Gabbard*, 219 F.Supp.2d at 1135 (explaining that whether scientific evidence "can be and has been tested" is "really the foundation for scientific inquiry in general"). Second, when asked about indicia of reliability, Mr. Trower is unsure of the details of most of the studies he cites, Trower Dep. at 72:9-14, 74:4-11, 12-19, 79:7-11, 84:8-18, 90:10-91:7, or states that he cannot reveal the information for confidentiality or security reasons. Trower Decl. ¶ 12; Trower Dep. at 24:11-25:23, 70:3-71:6.

Mr. Trower's expert testimony also is unreliable and irrelevant because he formed his absolute opinion that *any* level of MW emissions is harmful over 50 years ago, decades before Wi-Fi was introduced. *See* Trower Dep. at 50:1-15, 108:6-7. When asked whether he

was aware of PPS's Wi-Fi emission levels, Mr. Trower stated that the levels were "irrelevant" because "all microwaves at any level are dangerous, so whether you have a low reading or a slightly higher reading or one higher than that, there is no safe level of microwave irradiation." Trower Dep. at 50:4-14. Mr. Trower's absolute opinion is based principally on an unpublished United States Defense Intelligence Agency ("DIA") study conducted in 1974, which noted possible long-term effects of MW emissions. *See* Trower Decl. ¶ 11; Trower Dep. at 68:16-69:19. Mr. Trower dismisses modern studies cited by the National Cancer Institute and the U.S. Food and Drug Administration, which have found no correlation between RF energy and cancer, simply because those studies "disagree" with the DIA's conclusion in 1974. Trower Dep. at 112:4-113:5, 117:24-118:22. Mr. Trower's outdated opinions are not admissible. *Penor v. Columbia Cnty.*, No. 08-1114-HU, 2010 WL 916211, at \*2 (D. Or. 2010) ("An expert may be properly excluded if his experience or education in the field is outdated.").

Because Mr. Trower is not qualified to offer an expert opinion, and his expert opinions are neither reliable nor relevant, his declaration and reply declaration should be struck from the record.

### CONCLUSION

Plaintiffs' expert declarations fail to meet the requirements of Rule 702 and *Daubert*. The Court should strike the declarations from the record and give them no weight in considering PPS's motion for summary judgment.

DATED this 6th day of April, 2012.

MILLER NASH LLP

s/ Bruce L. Campbell

Bruce L. Campbell, OSB No. 925377

bruce.campbell@millernash.com

Madeline Engel, OSB No. 096283

madeline.engel@millernash.com

Fax: (503) 224-0155

Attorneys for Defendant Portland Public Schools

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I hereby certify that I served the foregoing memorandum in support of defendant's motion to exclude or strike plaintiffs' expert reports on:

Mr. Shawn E. Abrell  
Attorney at Law  
3405 N.W. 31<sup>st</sup> Circle  
Camas, Washington 98607  
E-mail: shawn.e.abrell@gmail.com

Attorney for Plaintiffs

Mr. Tyl W. Bakker  
Tyl W Bakker LLC  
621 S.W. Alder Street, Suite 621  
Portland, Oregon 97205  
E-mail: tylbakker@gmail.com

Attorney for Plaintiffs

by the following indicated method or methods:

- CM/ECF system transmission.**
- E-mail.** As required by Local Rule 5.2, any interrogatories, requests for production, or requests for admission were e-mailed in Word or WordPerfect format, not in PDF, unless otherwise agreed to by the parties.
- Facsimile communication device.**
- First-class mail, postage prepaid.**
- Hand-delivery.**
- Overnight courier, delivery prepaid.**

DATED this 6th day of April, 2012.

s/ Bruce L. Campbell

Bruce L. Campbell, OSB No. 925377

Of Attorneys for Portland Public Schools



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APPEARANCES

FOR THE PLAINTIFFS: Shawn E. Abrell  
Attorney at Law  
3405 NW 31st Circle  
Camas, WA 98607

Tyl W. Bakker  
Tyl W. Bakker, LLC  
5621 SW Hood Street  
Portland, OR 97239

FOR THE DEFENDANT: Bruce L. Campbell  
Miller Nash LLP  
111 SW Fifth Avenue  
Suite 3400  
Portland, OR 97204

COURT REPORTER: Jill L. Erwin, CSR, RMR, CRR  
Certified Realtime Reporter  
Registered Merit Reporter  
  
United States District Courthouse  
1000 SW Third Avenue, Room 301  
Portland, OR 97204  
  
(503) 326-8191

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TRANSCRIPT OF PROCEEDINGS

DEPUTY COURTROOM CLERK: All rise. This court is again in session. Please be seated. Your Honor, this is the time and place set for oral argument in Case No. 3:11-CV-739-MO. AHM, et al. v. Portland Public Schools.

Counsel, can you introduce yourself for the record?

MR. CAMPBELL: Your Honor, Bruce Campbell on behalf of the defendant, Portland Public Schools.

MR. ABRELL: Shawn Abrell on behalf of plaintiffs, the Morrisons.

MR. MORRISON: David Morrison on behalf of my daughter and the children of Portland.

MR. BAKKER: And Tyl Bakker also here for plaintiff.

THE COURT: I sent out an email listing some topics of concern for oral argument, and I have a response from plaintiffs, what they styled their oral argument memorandum.

Mr. Campbell, do I have anything from you?

MR. CAMPBELL: No, Your Honor. I was prepared to address the Court's directive orally.

THE COURT: Why don't you go ahead, then.

MR. CAMPBELL: The Court has asked the parties to address the effect of the *Dunifer* case on the -- on the present case, and *Dunifer* is directly applicable,

1 because *Dunifer*, especially when coupled with *Bennett v.*  
2 *T-Mobile* case that we've cited in our brief, shows that  
3 this case is not properly before the district court.

4 The *Bennett v. T-Mobile* case holds that if you have  
5 an attack against the FC -- a party who is complying with  
6 FCC regulations, it's an attack against the regulations  
7 themselves. *Dunifer* goes on to say that an action  
8 challenging FCC regulations is equivalent to an action to  
9 enjoin, annul, or set aside an order of the FCC.

10 Now, if that's the case, then the sole jurisdiction  
11 lies initially with the FCC and then there's a direct  
12 right of appeal to any court of appeal other than the  
13 federal circuit under 47 U.S.C. § 402 and the Hobbs Act,  
14 which is 28 U.S.C. § 2342.

15 So *Dunifer* makes clear, and coupled with *Bennett*,  
16 that this case is not appropriately before this Court.

17 THE COURT: So your contention is that  
18 plaintiffs need to go first to the FCC?

19 MR. CAMPBELL: Correct.

20 THE COURT: And what do they ask the FCC to do?

21 MR. CAMPBELL: Well, they file -- the courts at  
22 47 -- or CFR § 1.1. It's an action -- it's a petition  
23 for rule-making. They ask the FCC to revisit its radio  
24 frequency exposure guidelines, specifically the limits  
25 that are applicable here to this type of frequency, which

1 is one -- 1 milliwatt per square centimeter.

2 THE COURT: So the FCC agrees or doesn't to  
3 take up that rule-making.

4 MR. CAMPBELL: They can go -- if they don't  
5 like what the FCC does, they can take that directly to  
6 the -- any circuit court.

7 THE COURT: Let's say the FCC agrees and  
8 determines that, what exactly would they be asking to be  
9 determined; that laptops can't emit more than a certain  
10 level or -- my concern is that Portland Public Schools,  
11 as an entity, are not directly subject to FCC  
12 regulations. Or do you disagree with that?

13 MR. CAMPBELL: I think if Portland Public  
14 Schools were violating the FCC's exposure limits, then  
15 they would have -- they could then bring an action  
16 directly against the -- against the Portland Public  
17 Schools. That would be appropriate. But here, according  
18 to the plaintiffs' own expert, the maximum readings are  
19 within -- are only one -- 1/500th of the FCC's exposure  
20 limits for RF frequency.

21 THE COURT: So your contention is that if  
22 the -- it's a chain of events. They have to go to the  
23 FCC. Let's assume the FCC agrees to engage in  
24 rule-making and believes their argument and determines  
25 that in some way their current measurements are too high.

1 Now, in what way? Because this is typically product  
2 specific, so they -- they're just -- you're expecting  
3 that the FCC would agree to general, sort of,  
4 environmental limits?

5 MR. CAMPBELL: Well, one of the arguments that  
6 the plaintiffs' experts has made is that the FCC's  
7 exposure guidelines are not sufficiently protective.  
8 They don't account for what they call nonthermal effects.  
9 And this was an argument that was previously made to the  
10 FCC when it enacted its rules. And even afterwards -- I  
11 think this is the *Cell Phone Task Force* case -- there's a  
12 challenge to the FCC's regulations before the Second  
13 Circuit. Similar challenge is made later before the D.C.  
14 circuit.

15 THE COURT: So you're saying that at a minimum  
16 they have in the past and could take up sort of a general  
17 environmental limit that ought to be imposed? They  
18 haven't yet? Isn't that the argument plaintiffs have to  
19 make? Not that a particular laptop or cell phone tower,  
20 or something else, emits too high of frequencies, but  
21 that the environment at the school, in combination with  
22 everything, is too high?

23 MR. CAMPBELL: That's right. And the exposure  
24 limits take all that into account. There's a maximum  
25 power density, which, in this case, is one -- 1 milliwatt

1 per square centimeter, and that's averaged over a  
2 30-minute period.

3 THE COURT: So if they believe all those  
4 arguments, which they've heard in the past in some  
5 iteration, if FCC believes all those arguments plaintiff  
6 is currently making, they could engage in rule-making and  
7 enact a new rule that would, in effect, lower those  
8 limits?

9 MR. CAMPBELL: That's absolutely correct. They  
10 could lower it to a megawatt.

11 THE COURT: If they did that, you contend that  
12 Portland Public Schools would either fall into line or --  
13 if not, what?

14 MR. CAMPBELL: Well, I think that Portland  
15 Public Schools would fall into line. We would not  
16 violate the FCC's exposure guidelines.

17 THE COURT: Are you directly subject to FCC's  
18 exposure guidelines? In other words, is Portland Public  
19 Schools an entity that's covered by the FCC's exposure  
20 guidelines? I guess, by virtue of being guidelines, you  
21 are, or --

22 MR. CAMPBELL: Yeah. I think that covers all  
23 wireless devices sold throughout the country.

24 THE COURT: Well, I guess that's the genesis of  
25 my question, though. It covers wireless devices, but

1 does it tell schools that they do or don't have to do  
2 something about the effect of those devices at a school,  
3 or do you -- that's what I'm wondering if you agree or  
4 disagree.

5 MR. CAMPBELL: I guess what my understanding  
6 would be if -- if -- let's say the FCC dropped its  
7 exposure guideline to 1 microwatt and Portland Public  
8 Schools continued to have a Wi-Fi system in place that  
9 exceeded that exposure limit, then they no longer have  
10 the shield of being -- of compliance of the FCC's limits,  
11 and they could be subject to liability if there's a  
12 showing of harm and all the other factors would be  
13 present for liability.

14 THE COURT: Since it had gone to the FCC for  
15 rule-making, you wouldn't have the current summary  
16 judgment argument you have now that the exclusive for  
17 primary jurisdiction is with the FCC --

18 MR. CAMPBELL: Well, if the plaintiffs --

19 THE COURT: -- if all of that fell into place?

20 MR. CAMPBELL: If they had gone the correct  
21 route, we wouldn't have this lawsuit, period. We would  
22 be before the FCC.

23 THE COURT: So the answer to the second oral  
24 argument question is that you believe that they have at  
25 least a fair shot at rule-making by the FCC; that the

1 question presented here is a question that fairly could  
2 be presented to the FCC?

3 MR. CAMPBELL: And should be presented to the  
4 FCC. The FCC is --

5 THE COURT: The reason I ask about could is it  
6 would sort of undercut the primary jurisdiction argument  
7 if I granted summary judgment on the issue, say, of  
8 primary jurisdiction, the more -- well, on that issue.  
9 And FCC turned around and said this isn't the sort of  
10 thing -- this isn't the sort of issue on which we engage  
11 in rule-making.

12 As best you can tell, your claim today is that it is  
13 the sort of issue in which they engage in rule-making?

14 MR. CAMPBELL: That's correct.

15 THE COURT: Thank you.

16 Mr. Abrell, are you speaking to this issue?

17 MR. ABRELL: Yes, sir.

18 THE COURT: I've read your written submission.  
19 Go ahead and respond to what you've heard as well as  
20 supplement your written submission.

21 MR. ABRELL: Yes, Your Honor. First of all, we  
22 would argue that a claim to the FCC would be futile in  
23 that the FCC would -- has delayed similar types of claims  
24 up to two to three years. And we cited in our briefs the  
25 petition for rule-making by the environmental effects of

1 radio frequency radiation, petition for inquire to  
2 consider amendment of rules in parts one and two,  
3 petition for inquiry of EMR network.

4 That -- that claim was filed, I believe, several  
5 years ago and is still pending.

6 THE COURT: That delay doesn't give me  
7 jurisdiction. I mean, jurisdiction is an interesting  
8 question, because it could mean that I can have all the  
9 sympathy in the world and believe a case is urgent, but  
10 I'm simply not authorized to hear it.

11 MR. ABRELL: Well, I believe that the primary  
12 jurisdiction doctrine --

13 THE COURT: Let's not start with primary.  
14 Let's start with exclusive jurisdiction.

15 MR. ABRELL: Exclusive. Well, if we're talking  
16 about exclusive jurisdiction, Your Honor, we believe that  
17 the Telecommunications Act gives the FCC specific  
18 exclusive jurisdiction in essentially three areas. Those  
19 three areas are licensing, the rollout of wireless  
20 facilities, and pricing. Consumer pricing. That's  
21 specifically set out in statute.

22 Now, 401(a) --

23 THE COURT: When you say you believe there are  
24 those three areas, you know, I'm bound by the case law of  
25 the Supreme Court and the Ninth Circuit, and those cases

1 talk about exclusive jurisdiction in areas beyond those  
2 three that you've just mentioned.

3 MR. ABRELL: Well --

4 THE COURT: *Bennett*, for example, is --

5 MR. ABRELL: I would -- I would agree --

6 THE COURT: Let me finish my question.

7 So *Bennett* is about conflict preemption of state  
8 laws. *Dunifer* we talked about. *United States v. Any &*  
9 *All Radio Station Equipment*, that's the Eighth Circuit.  
10 The Ninth Circuit, in *Moser*, looks at it, though, and --  
11 you know, so we have a number of areas where either  
12 conflict preemption or level of radiation have been taken  
13 up and dealt with by courts of appeals or the Supreme  
14 Court as questions of exclusive jurisdiction for the FCC.

15 MR. ABRELL: Well, I -- I would point to the  
16 fact that those -- at least *Dunifer* and *Wilson*, those --  
17 those -- first of all, they're appeals from agency  
18 decisions. They're -- *Dunifer* is -- *Dunifer* is a case  
19 relating to the FCC's jurisdiction under licensing and  
20 enforcement. *Wilson* is dealing with overpricing. And  
21 those are -- now, you -- you argue that the -- they give  
22 additional jurisdiction. Under -- under 401(a), it gives  
23 the FCC -- the district courts jurisdiction to enforce  
24 provisions.

25 THE COURT: Well, the question of exclusive

1 jurisdiction is simply whether the question in front of  
2 me is one that has been specifically tasked to the FCC.

3 MR. ABRELL: Well --

4 THE COURT: And your contention is that  
5 determining safe levels of radiation is a question that  
6 has not been specifically tasked to the FCC?

7 MR. ABRELL: Well, I would distinguish that our  
8 claim is not a challenge to the guidelines. Our claim is  
9 a challenge to the school's proprietary business  
10 decision, which is not a regulation, which is not  
11 preemptive.

12 THE COURT: Well, you have the argument that  
13 this isn't a direct challenge and that's why we've talked  
14 about cases that make a distinction, one we're thinking  
15 about, between direct challenges; a lawsuit that says the  
16 FCC regulations are wrong versus one that challenges the  
17 consequences of those regulations, a lawsuit that says  
18 all is well and good for the school to hide behind these  
19 regulations, but that's -- the school is wrong.

20 But my question is earlier than that. My question  
21 is just whether, first of all, before we get to the  
22 indirect and direct question, you agree or disagree that  
23 the FCC is charged with determining safe levels of  
24 microwave radiation.

25 MR. ABRELL: I -- I agree that they set

1 guidelines. I would not say that those are set at safe  
2 levels.

3 THE COURT: That is not my question. So please  
4 listen and answer the question I'm asking.

5 MR. ABRELL: Okay.

6 THE COURT: Do you agree that Congress has  
7 tasked the FCC with determining safe levels of radiation?

8 MR. ABRELL: Yes.

9 THE COURT: All right. So, normally, then, a  
10 lawsuit that challenges an FCC's decision about safe  
11 levels of radiation would have to go to the FCC first,  
12 either by exclusive or primary jurisdiction. If I  
13 understand your argument, it's simply that you're not  
14 directly challenging those regulations.

15 MR. ABRELL: And we would argue that --

16 THE COURT: Is that right?

17 MR. ABRELL: That's correct.

18 THE COURT: All right.

19 MR. ABRELL: We further argue that we -- we are  
20 bringing constitutional claims. I would further argue  
21 that if we were to bring constitutional claims in the  
22 FCC, they wouldn't even hear it. They would find that  
23 they don't have jurisdiction.

24 THE COURT: Well, our whole question today, of  
25 course, if there isn't a direct challenge, is whether the

1 challenge you are bringing, whether cloaked in  
2 constitutional claims or other claims, is, in fact, a  
3 challenge to the consequences of FCC rule-making. And  
4 what I'm concerned about there is that the cases that  
5 we've discussed, while not directly on point, do suggest  
6 either in the Ninth Circuit or in the Supreme Court case  
7 law that one doesn't get around the exclusive  
8 jurisdiction of the FCC by challenging the consequences  
9 of the decision as opposed to the regulation itself. So  
10 what do you make of that?

11 MR. ABRELL: Could you restate that,  
12 Your Honor?

13 THE COURT: I think it's clear, whether you  
14 agree or not, that if a litigant challenges a rule  
15 propounded by the FCC that that goes to the FCC first.

16 MR. ABRELL: I agree.

17 THE COURT: There is a body of cases that  
18 concerns me that suggests that even if a litigant isn't  
19 directly challenging the rule but challenging one of the  
20 direct consequences of the rule -- so, here, for example,  
21 it would be that the schools utilize or rely on the FCC's  
22 rule-making about safe levels to decide what's safe at  
23 school. You're challenging the school's decision, but  
24 the school's decision is arguably a consequence of the  
25 FCC's decision; that is, for me to determine or a jury to

1 determine, for example, that the school is providing an  
2 environment that's unsafe, the fact-finder would have to  
3 necessarily be deciding that the FCC's decision about  
4 what's safe or not is wrong.

5 So let's start with that. Can you envision any jury  
6 verdict in this case that wouldn't rest on the premise  
7 that the FCC's decision about what is safe is wrong?

8 MR. ABRELL: I -- I would think that as it  
9 dovetails, a jury's determination would find that Wi-Fi  
10 or the powers emitted by Wi-Fi were harmful.

11 THE COURT: Well, that's the point of your  
12 expert submissions; right?

13 MR. ABRELL: Correct.

14 THE COURT: Your experts are saying that to  
15 date we've been insufficiently thoughtful about these  
16 levels and that they're harmful.

17 MR. ABRELL: Correct.

18 THE COURT: And that the FCC's determination --  
19 your experts say the FCC's determination is incorrect;  
20 right? Don't they say that?

21 MR. ABRELL: I believe they do, in parts; but  
22 that's -- yes, they do.

23 THE COURT: I'm not trying to trap you here. I  
24 think it's all out on the table.

25 MR. ABRELL: I agree.

1 THE COURT: You believe the FCC is wrong. And  
2 so the trial goes something like this: You don't start  
3 your case by saying the FCC's ability here, they're  
4 wrong. You start your case by saying Portland Police is  
5 providing an environment that's harmful to children.  
6 Here are our experts to prove that.

7 MR. ABRELL: Correct.

8 THE COURT: And the first thing out of  
9 Portland -- I said "Portland Police." I'm sorry. First  
10 thing out of Portland Public School's mouth is, "We're  
11 relying on the FCC's guidelines to determine what's safe,  
12 so it's safe because the FCC says so." And your rebuttal  
13 case is that the FCC is wrong.

14 That's the trial, isn't it?

15 MR. ABRELL: Yeah, I would say that's a  
16 possible affirmative defense, but I don't think that  
17 makes their case.

18 THE COURT: Right. Because you're going to  
19 knock it down and say the FCC is wrong.

20 MR. ABRELL: Correct.

21 THE COURT: All right. So I don't see how  
22 anything about the way this case is presented to a  
23 fact-finder avoids a decision that the FCC is wrong.

24 Now, I agree that this case does not directly  
25 challenge the FCC's rules, so the whole question in front

1 of me and the reason why we're having oral argument is am  
2 I bound by the cases that we've been talking about to  
3 find that if the trial is going to end up being a -- at  
4 least in major part about whether the FCC is right or  
5 wrong, I'm obligated to first send the issue to the FCC.

6 MR. ABRELL: Well, I think that the doctrine of  
7 primary jurisdiction is an equitable doctrine where the  
8 courts have to balance the comity between the states and  
9 the agencies. Now, there's factors that go into that.

10 Now, if we have acute harm here, harm to children in  
11 school and the court knows it's going to take two to  
12 three years, if ever, to get a ruling from the FCC, it  
13 must strike the balance between the state's high duty  
14 when it steps in the state of a father to care for their  
15 children in a reasonable way.

16 Now, they -- they put no thought at all into the  
17 health and safety aspects. It was the -- the decision  
18 was a proprietary business decision made by --

19 THE COURT: "They," meaning Portland Public  
20 Schools?

21 MR. ABRELL: Correct. Made by the -- the  
22 business -- business people. So we would argue that in  
23 that instance when -- when the State has to look after  
24 the children, that it would -- it would be -- they have  
25 to balance the -- the interests of the State versus

1 sending this off so the FCC can preserve their  
2 jurisdiction. And, by the way, we have a -- an agency  
3 that's -- that's so tied up with the telecommunications  
4 companies that it's almost ineffective.

5 THE COURT: Well, if I -- if I kept cases that  
6 I normally wouldn't have jurisdiction over only when the  
7 agency that has jurisdiction is closely tied to the  
8 industry it regulates, then I'd keep a lot of cases,  
9 because the FCC is not the only one where that's the  
10 problem.

11 But, yet, that fact, if I accept it as true, doesn't  
12 confer jurisdiction on me.

13 MR. ABRELL: I would -- I -- I -- going back to  
14 jurisdiction, we believe that the Court has jurisdiction  
15 to hear a constitutional claim; that if we even took --  
16 what we would argue in front of the FCC is that your  
17 guidelines are unconstitutional because they're not  
18 protective of children and for quite a few other reasons,  
19 but we argued that the guidelines don't even apply based  
20 on the history of the guidelines and how they set them.

21 THE COURT: Don't apply to Portland Public  
22 Schools?

23 MR. ABRELL: Don't apply to children.

24 THE COURT: I see.

25 MR. ABRELL: But, back again, the FCC has

1 specific jurisdiction to hear a certain type of claims.  
2 It doesn't have just a broad-sweeping jurisdictional  
3 authority to hear anything related to anything. In fact,  
4 I have a recent case here.

5 THE COURT: Well, I mean, I agree with that  
6 position, but I asked you a moment ago if you thought the  
7 FCC had jurisdiction, by Congress, to determine safe  
8 levels of radiation, and you said yes.

9 MR. ABRELL: Yes. But our claim -- I think  
10 it's the type of claims that are made that's important.  
11 Our claims would be a constitutional violation, and I  
12 don't think the Court of Appeals -- the FCC would even  
13 have jurisdiction to hear that.

14 THE COURT: Well, your claim to the FCC would  
15 be that your currently erroneous determination of safe  
16 levels of radiation unconstitutionally harms children;  
17 right? I mean, that's your constitutional claim?

18 MR. ABRELL: That would be a constitutional  
19 claim. The other would be to -- for -- a request for  
20 rule-making as to whether or not they apply to children,  
21 but we know that that would be a futile attempt and would  
22 last years to do.

23 THE COURT: Thank you.

24 I think I'm probably in the top group of judges in  
25 America when it comes to frustration with the

1 effectiveness and efficiency and pace of rule-making on  
2 important questions, but I accept, for purposes here  
3 today, that the claims before me, while not directly  
4 challenging FCC action, do indirectly challenge in a very  
5 serious way -- I think the parties acknowledge -- that  
6 the kind of trial I described is one in which whether the  
7 FCC is right about the decision it's made regarding safe  
8 levels is at the very core of that trial. And so it's  
9 with no pleasure that I determine that that question  
10 raised by this case, in this trial, is one allocated  
11 first to the FCC and then exclusively, after that, to the  
12 Court of Appeals.

13 Even if I were wrong about that, the doctrine of  
14 primary jurisdiction would rear its head, and that  
15 similarly counsels that I exercise my discretion to send  
16 it first to the FCC, and I would -- and I do so, if  
17 that's the decision before me.

18 I'm aware that under primary jurisdiction there are  
19 countervailing factors such as the pace of  
20 decision-making and the history of prior decision-making  
21 on this -- on similar issues, but the core purpose of FCC  
22 rule-making is to give the chance to pass on the validity  
23 of its own decisions to ensure review by the agency  
24 charged with it and an agency that has certainly far more  
25 expertise than this Court does on this question.

1           So under either exclusive or primary jurisdiction, I  
2 would send this case to the FCC. I think it's exclusive  
3 jurisdiction, and I grant summary judgment to that  
4 effect. But I also grant the second theory of summary  
5 judgment, which is primary jurisdiction.

6           I'm unaware what the Court of Appeals does with  
7 delays in the agency, but I'm hopeful that if this is  
8 unduly delayed that the litigants are not without remedy  
9 to get even the delay looked at.

10           But I think the scheme is pretty clear here. In my  
11 own view of the cases that I have cited to you and that  
12 you have cited to me are that it's not only when the  
13 agency's regulations are being directly challenged, but  
14 that something less than a direct challenge can still  
15 result in exclusive jurisdiction; that you can't evade  
16 these provisions by bringing actions where the outcome of  
17 the agency's order is the issue or one of the major  
18 issues in the case, and that's our case.

19           Portland Public Schools is also moot on the merits  
20 for summary judgment. And, of course, since I don't have  
21 jurisdiction, as I've determined it, I make no decision  
22 about the merits of the case and should not do so.

23           That will be something we take up if it turns out  
24 I'm wrong about exclusive jurisdiction.

25           So I grant PPS's motion for summary judgment on

1 exclusive and primary jurisdiction. I deny plaintiffs'  
2 motion for summary judgment. And there have been motions  
3 to strike, and the like, which I deny as moot by my  
4 decision here today.

5 Thank you all. We'll be in recess.

6 MR. ABRELL: Your Honor, one last point.

7 THE COURT: Yes.

8 MR. ABRELL: Well, we would ask that being that  
9 you found in favor of -- found without jurisdiction, we  
10 would ask that this case be abated and we would ask for a  
11 preliminary injunction pending the outcome of the FCC  
12 ruling, giving the acute harm to children that's going to  
13 be ongoing.

14 THE COURT: It's a first year law school rule  
15 that if you don't have jurisdiction over a case you can't  
16 issue rules, so as sympathetic as I might be to the  
17 question of harm, if I don't have jurisdiction, I can't  
18 enjoin. I can't abate. The case is not properly in this  
19 court, so I can't accommodate that request.

20 Thank you. We'll be in recess.

21 DEPUTY COURTROOM CLERK: This court is  
22 adjourned.

23 (Hearing concluded at 3:30 p.m.)  
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C E R T I F I C A T E

I certify, by signing below, that the foregoing is a true and correct transcript of the record of proceedings in the above-entitled cause. A transcript without an original signature, conformed signature, or digitally signed signature is not certified.

/s/Jill L. Erwin

Jill L. Erwin, RMR, CRR  
Official Court Reporter

Date: August 17, 2012

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF OREGON  
PORTLAND DIVISION

**AHM, et al.,**

Plaintiffs,

No. 3:11-cv-00739-MO

v.

JUDGMENT

**PORTLAND PUBLIC SCHOOLS,**

Defendant.

**MOSMAN, J.,**

Based on my Order of July 20, 2012 [106],

IT IS HEREBY ORDERED AND ADJUDGED that this case is DISMISSED with prejudice. Pending motions, if any, are DENIED AS MOOT.

DATED this 24th day of July, 2012.

/s/ Michael W. Mosman  
MICHAEL W. MOSMAN  
United States District Judge