## Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
Notice of Proposed Rulemaking	)	
18 FCC Rcd 13187, 13188 ¶1 (2003)	)	ET Docket No. 03-137
	)	
And	)	
	)	
Service Rules for the Advanced Wireless Services	)	WT Docket No. 12-357
H BlockImplementing Section 6401 of the	)	
Middle Class Tax Relief and Job Creation Act of	)	
2012 Related to the 1915-1920 MHz and	)	
1995-2000 MHz Bands ¶53 footnote 95	)	

To: Office of the Secretary

Federal Communications Commission

Washington, DC 20554

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February 2, 2013

## AFFIDAVIT OF SUSAN D. FOSTER, MSW

San Diego County ]
I, Susan D Foster, MSW, attest that my statements are true to the best of my knowledge
Comment round for ET Docket No. 03-137 and WT Docket No. 12-357.

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State of California

- 1. My name is Susan D Foster, MSW. My address is 15957 Avenida Calma, Rancho Santa Fe, California 92091.
- 2. I am a medical writer and the organizer of a brain study of firefighters exposed to RF radiation from a cell tower adjacent to their fire station of over 5 years.
- 3. In 2004 I organized a pilot study of California firefighters who worked up to ninety (90) hours per week in fire stations with cell towers in close proximity to the two (2) stations where the firefighters work, eat, and sleep. The men were experiencing profound neurological symptoms following activation of the towers in 1999.
- 4. The symptoms experienced by the firefighters, all of whom had passed rigorous physical and cognitive exams prior to being hired by the fire department, included but were not limited to the following: headaches, extreme fatigue, sleep disruption, anesthesia-like sleep where the men woke up for 911 calls "as if they were drugged", inability to sleep, depression, anxiety, unexplained anger, getting lost on 911 calls in the town they grew up in, a twenty (20) year medic forgetting basic CPR in the midst of resuscitating a coronary victim, immune-suppression manifest in frequent colds and flulike symptoms.
- 5. The neurological testing and SPECT scans [single-photon emission computed tomography] of the brain were conducted by Gunnar Heuser, MD, PhD and J. Michael Uszler, MD. All six (6) firefighters were found to have brain abnormalities on SPECT scan. The doctors thought they would find areas of limited function in the brain based on

the symptomatology. Instead, they found a pervasive, hyper-excitability of the neurons which suggested the exposure to RF (microwave) radiation was causing the neurons to continually fire, without rest. RF radiation appeared to act as a constant stimulant even when the men were away from the station, and in repose. The SPECT scans were considered abnormal in all 6 firefighters.

- 6. Cognitive function, reaction time, and impulse control were measured objectively using T.O.V.A. testing [Test of Variables of Attention]. In all six (6) firefighters, impairment was found with cognitive function, reaction time and impulse control. Three (3) of the six (6) firefighters were captains. The captain on each shift is in charge of making life altering decisions for all firefighters and potential victims. They order firefighters into a burning building, and conversely, they order them out before a roof may collapse, for example. Impairment of all three critical functions could cost firefighters and the community they serve either life or limb.
- 7. The testing was conducted in 2004. The cell towers are in place at the two (2) fire stations where the test subjects work for the duration of a twenty-two (22) year lease. The men we tested have remained at the stations as this is the only work they know in the only community they have ever lived in. One (1) of the six (6) men tested did move to another department after his wife gave birth to an a boy who was diagnosed with Autism at age 2. This was the first live birth experienced by the "firefighter family" at this department since activation of the tower three (3) years earlier.
- 8. I have followed up with the firefighters who report continued symptoms as described in paragraph 4. Additionally, all firefighters report profound memory loss.
- 9. Two (2) of the firefighters, men we did not test in the pilot study but men who were exposed to RF radiation from the cell tower since their installation and activation in 1999, have gone out on psychiatric disability. This is almost unheard of among firefighters. The diagnoses were Post Traumatic Stress Disorder for one firefighter; he went out on an emergency run, and simply stopped talking after he returned to the station. The second

firefighter suffered an apparent break with reality. This occurred in the fire station when he returned following a short term disability for an unrelated injury. This break with reality was followed by an abrupt collapse and loss of consciousness. Because two (2) women have suffered strokes while in the fire station with the towers fully activated, Vascular Spasm Stroke (VSS) is suspected by Dr. Heuser and myself of having caused the two (2) "psychiatric" diagnoses. If not treated with rest and supplemental oxygen, it is possible for some VSS patients to have difficulty regaining speech and full cognitive abilities. This may be a case of misdiagnosis by the treating physicians who were unfamiliar with the potential of cell towers to create thermal effects well under the FCC limit of 1,000 uW/cm2, thus heating blood in the brain and inducing VSS. Further study of these men is imperative.

- 10. What is particularly germane to the critical decisions the FCC is currently facing regarding RF safety guidelines is the fact the FCC currently allows 1,000 microwatts per centimeter squared (uW/cm2) as an emission standard from cell towers. Yet all the symptoms attributed by the firefighters, as well as measurable brain and central nervous system abnormalities described above, occurred within close proximity to a cell tower measured at between 1 2 uW/cm2 by Peter Sierck, BBEC, CEO of Environmental Testing & Technology in Encinitas, CA. Thus the emissions from towers were measured at approximately 1/1000<sup>th</sup> to 1/500<sup>th</sup> of the FCC's allowable limit. "Hot spots" of reflected radiation were measured at 15 and 30 uW/cm2, yet these "hot spots" were still a fraction of what the FCC allows. Therefore, I strongly suggest the FCC is not basing its standards on biological effects, but rather physics, and principles of physics do not protect the brains and central nervous systems of the strongest among us, our firefighters.
- 11. The failure to protect our populations based on biological effects of exposure to RF (microwave) radiation is an inherent shortcoming of the current FCC policy with respect to cell tower emissions and cell phone absorption. The adverse biological impact of these exposures are grossly underestimated. The FCC does not have independent science that can justify the massive exposure to RF radiation that currently exists from cell towers and

cell phones. The story told by our small pilot study of firefighters in California should be a warning with respect to cell phone absorption levels.

- 12. The FCC is being lobbied by the telecommunications industry to harmonize US standards with those of Europe, as dictated by ICNIRP. To do so would be a grave mistake. The only change that should be implemented with respect to cell phones is a reduction in allowable absorption of RF radiation. We are now dealing with 4G which is untested, and it does appear to have a thermal effect. Many countries keeping brain tumor statistics, especially those countries taking into account the two brain tumors associated with RF radiation exposure, gliomas and acoustic neuromas, are showing clear increases in these two tumors. The increases in brain tumors does appear correlated with the increased use of cell phones.
- 13. Based on the neurological abnormalities Dr. Heuser and I found in the firefighters, including hyper-excitability of the neurons which can results in cell death and consequent neuro-degenerative diseases such as Alzheimer's, Parkinson's Disease and ALS, I urge the FCC to reflect on the gravity of the decision facing you now, and I implore all Commissioners to reduce the allowable level of RF radiation absorbed by the human brain upon exposure to cell phones.

Respectfully Submitted by

Susan D. Foster, MSW 15957 Avenida Calma Rancho Santa Fe, CA 92091 February 2, 2013