November 29, 2019

Letter US National Park Service

Re: Yellowstone National Parks Cell Tower Permit Application

Comments on Access Parks - Broadband Internet for Park Residents and Employees of Yellowstone Park

From Cindy Russell MD

Dear National Park Service:

I am writing to strongly urge you to **DENY** the application from AccessParks (AP) for a Right of Way (ROW) permit to the National Park Service (NPS), which is proposing the installation of close to 500 wireless radios, microwave point-to-point, point-to-multipoint, and indoor Wi-Fi installations throughout Xanterra managed properties in Yellowstone National Park (YNP). It is anticipated that there will be further installation to other National Park Services and other concessioners.  You need to carefully consider many scientific issues before you embark on this venture.

**Too Much Technology and Too Little Nature**

There are not only health and environmental effects which have not been considered, there is also the enjoyment of our natural surroundings that is at risk with these installations. People travel to the National Parks to enjoy the solitude and beauty of our wonderous pristine natural environment that thrives without the interference of human activities. The idea that the National Parks have poor reception is a bonus for many people (including myself) and their children who wish to disconnect from “City Life”, instead enjoying peaceful surroundings without distraction. We have recently camped with friends in the wilderness and our teenagers begged to travel 30 miles to an internet café after only a day. The parents refused. The teens did not know what to do with themselves for a few days and then were appreciative there was no Wi- Fi connection. They had deep conversations, hiked, relaxed. They said it was the best time they have had together.

If people are concerned with emergency communications, wired connections and landlines work well for transactions and are actually better in emergencies where the batteries run dry from cell towers if the power is out more than 24 hours. Satellite phones are readily available, cheap and work anywhere in the world.

**Time to Disconnect our Phones and Reconnect with Nature**

With the introduction of wireless technologies in the last 20 years, adults and children now suffer from adverse effects of too much screen time. The rising addiction to technology creates not only structural brain changes now identified, but also stress in our kids who need to be away from technology to allow them to connect with their parents and friends. Social media and constant connection is stressful and unhealthy, causing depression, anxiety, memory loss, and behavioral problems. Nature is healing. We are wired to have human to human and human to nature connections to be happy individuals. That is what the science shows. It is not just an opinion. References provided.

**Health Effects of Wireless Technology**

I am a physician who has studied toxins in the environment for over 25 years and worked with my local Santa Clara County Medical Association and the California Medical Association to set public health policy regarding environmental toxins. While fighting a proposal to place a cell tower on my daughter’s middle school 10 years ago I began learning about the toxic effects of radiofrequency radiation on humans and the environment. I found it is similar to pesticides and chemicals in having at least one common biological mechanism of toxicity to cellular structures, i.e. oxidation (93 of 100 studies). Radiofrequency radiation (RFR) has since then been a focal point for me in toxics research.

The scientific literature is now demonstrating that wireless technology poses a clear threat to the health and wellbeing of humans and the environment. There are both acute and long-term effects of low levels of this non-ionizing radiation.

Acutely, people can experience electrohypersensitivity. It is similar to an allergy to Wi-Fi where people experience headaches, nausea, dizziness, fatigue and anxiety around cell phones, cell towers, Wi Fi and SmartMeters. This is increasing recognized in about 18% of the population according to recent research. (Bevington) About 0.65% cannot work in a “citified” environment because of this condition.

Biological effects occur at levels far below current “safety” standards that were set by engineers, not toxicologists, not the FDA, not the EPA and not biologists or scientists who study radiofrequency radiation (RFR). These scientists and physicians are so concerned they have joined forces to ask for a moratorium on cell towers and deployment of 5G until there is a reevaluation of safety standards that address the biological effects of wireless technologies and radiofrequency radiation they emit.

**Wireless Standards Based on Heat Not Biological Effects**

Currently the standards for wireless radiofrequency radiation (RFR) are based on heating of tissues. As we know toxins act on tissues not by heating but by altering basic biological processes. The scientific research has identified several mechanisms of toxicity, one of which is the creation of oxidative harm that affects many basic cellular processes, with injury to DNA, proteins, lipids, membranes with associated widespread adverse effects. The scientific literature shows harm to humans, mammals, reptiles, birds, insects, bacteria and even trees. What will the proliferation of cell towers in National Parks do to the environment and people who have antennas attached to buildings where they are staying? Read the unbiased non-industry funded literature and it will be abundantly clear. This will be detrimental to nature and its human inhabitants.

Long term effects of radiofrequency radiation have never been considered in current safety guidelines. Studies however show injury to sperm, ovaries, embryos, opening of the blood brain barrier, increased miscarriage rates, cancer, permanent neurologic damage and metabolic harm. Please, do not believe me, just look at the literature.

**Nature**

What about nature? Nature runs on low level electromagnetic radiation. Birds, bees, turtles, eels and others use it to navigate the globe and to communicate with other organisms. The scientific literature is replete with studies showing interference from RF radiation and adverse biologic harm from cell towers and Wi Fi. With such independent literature easily available to read, why would you put nature and other people in harms way to satisfy the desires of perhaps only a few individuals who feel the need for constant internet connection? The limited benefits do not seem at all equal to the real-world risks to an already suffering natural environment. Toxins in our environment are mounting and this includes wireless radiation from cell towers. Your own Department of Interior understands this. This is a critical issue considering this technology is poised only to increase.

If you are a National Park Service whose mission is to preserve the natural environment you wish for people to enjoy, then you will want to severely limit the number of cell tower communications, as you limit dumping of toxic waste in National Parks (hopefully). I ask that you reject this proposal outright and then study this issue carefully. If you choose to add a cell tower then it has to be done with full transparent knowledge of the effects on the natural environment and full consideration of the long term, non-thermal biological effects on living organisms, which our government to date has not yet done.

Leave nature alone in our most precious parts of the world. Let our National Parks remain historic, majestic and just pure nature, with all it’s complexity and wonder. The National Parks are our treasure and our future. You will be glad for this in 10 years or 20 years or as long as we can protect nature from repeated human folly.

Sincerely,

Cindy Russell, MD

Executive Director

Physicians for Safe Technology

[www.MDSafeTech.org](http://www.MDSafeTech.org).

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