

Kristin Aleshire

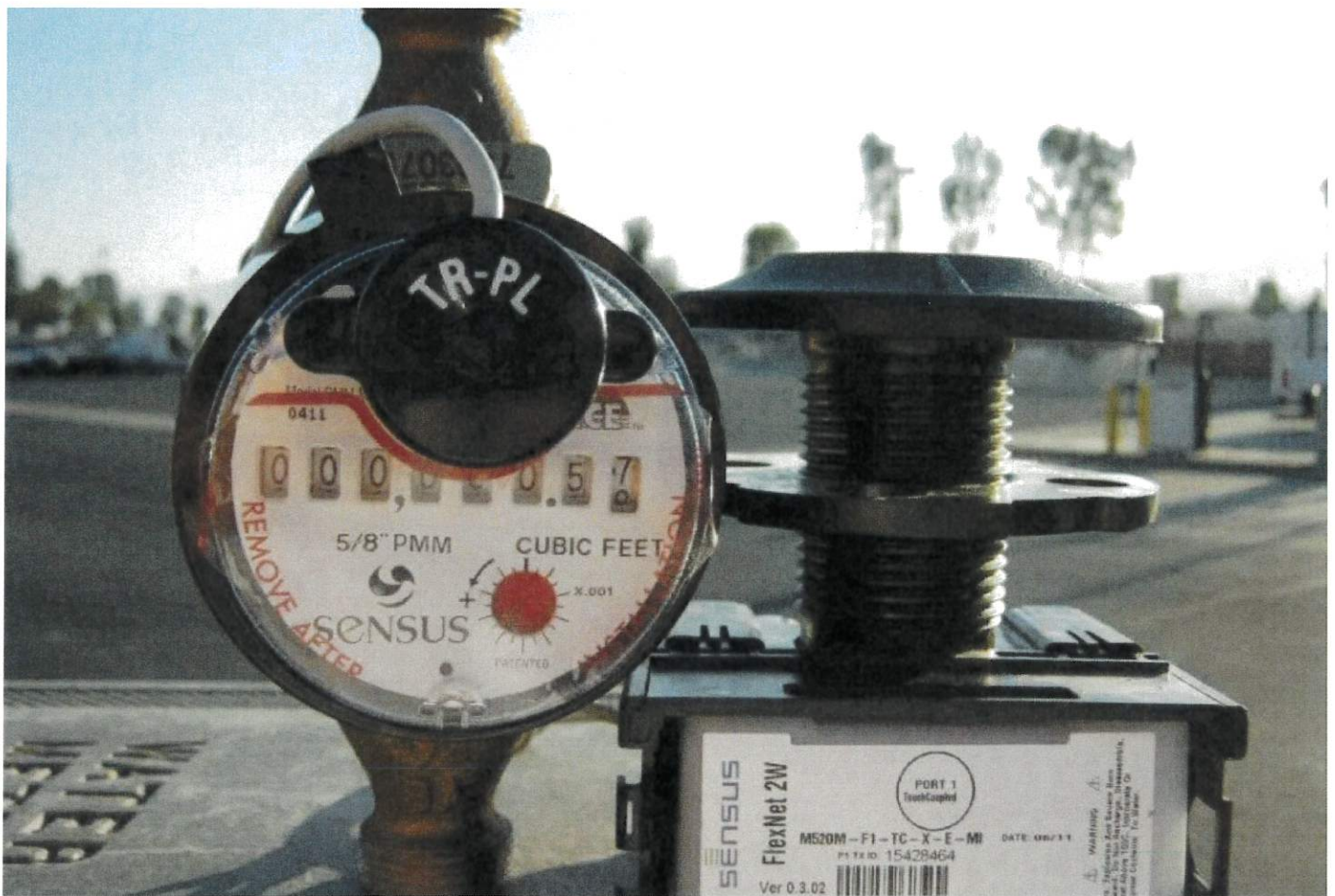
From: John Headley <headleyj62@gmail.com>
Sent: Friday, October 11, 2024 8:47 PM
To: Kristin Aleshire
Subject: 2736 Canada Hill Rd - Smart Meter Relocation

Mr. Aleshire,

Thank you for taking the time to speak with me this morning. As discussed, I'd like to formally request that the Town please relocate the newly installed Smart water meter from inside our home to outside the house on the branch line. We have health concerns with the smart meter being inside the house.

Please let me know if this work can be performed.

Thanks,
John Headley
301-462-9380



Understanding Smart Meters and Electromagnetic Frequency (EMF) Risk

What are Smart Meters?

Smart Meters measure attributes of electricity, natural gas or water as delivered to consumers and transmit that usage information digitally back to utility companies. Some Smart Meters are also designed to transmit real-time information to the consumer.

How do Smart Meters work?

Smart Meters communicate to their central systems using radio frequency (RF) transmission communication method. Internet and cell phone applications have become the preferred options because of their flexibility and ease of deployment.

Are Smart Meters within FCC standards?

The Federal Communications Commission (FCC) standard provides a currently accepted factor of safety against known thermally induced health impacts of

Smart Meters and other electronic devices in the same range of RF emissions. Exposure levels from smart meters are well below the thresholds for such effects. There is no evidence that additional standards are needed to protect the public from Smart Meters. The graphic below shows how Smart Meters compare to other common devices and appliances.

Device Related Power Density in microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$)

FM radio or TV broadcast station signal	0.005
SmartMeter™ device at 10 feet	0.1
Cyber cafe (Wi-Fi)	10-20
Laptop computer	10-20
Cell phone held up to head	30-10,000
Walkie-Talkie at head	500-42,000
Microwave oven, two inches from door	5,000

Source: Richard Tell Associations, Inc. (3)

Any known health effects?

Scientific studies have not identified or confirmed negative health effects from potential non-thermal impacts of RF emissions such as those produced by existing common household electronic devices and Smart Meters.

Are people exposed?

Smart Meters are typically installed outside of the home, either in place of or as part of existing meters. How much RF energy that people are exposed to from the Smart Meter depends on how far they are from the Smart Meter antenna and how the Smart Meter sends its signal. The frequency and power of the RF waves given off by Smart Meters are similar to that of a typical cell phone, cordless phone or residential Wi-Fi router. **Smart Meters typically send and receive short messages about 1% of the time.**

Can the Sensus Water Smart Meter cause fire?

The batteries are sealed with the High-Density Polyethylene (HDPE) enclosure of the smart point. These are typically installed in meter boxes which are typically under a metal or concrete lid. To date, there has been no report of a Sensus Water Smart Meter catching fire.

What are the benefits of a Smart Meter?

Smart Meters allow access to hourly weekly and monthly water usage as well as other added features such as leak detection and usage notifications. New meters also allow EMWD to read your water meter safely, accurately and in the most efficient manner possible.

Sources

- [RF Emission Safety](#) Presented by David Harlow, Sr. Product Manager, FlexNet Communications, Sensus
- UTC Utilities Telecom Council. [No Health Threats from Smart Meters](#). By Klaus Bender, PE, Director of Standards & Engineering Utilities Telecom Council
- [Health Impacts of Radio Frequency from Smart Meters](#). California Council on Science and Technology (CCST).
- Arthur Burns, Sr. Director, NA Energy-West, Sensus | Xylem. www.Sensus.com
 - [MPE Calculations for Electric Gas and Water Meters](#)

Websites:

<https://www.cancer.org/cancer/cancer-causes/radiation-exposure/smart-meters.html>

<http://www.who.int/peh-emf/about/WhatIsEMF/en/index1.html>

Radio Frequency Waves and Smart Meters

Seven thousand six hundred (7,600) water meters in the City of Jenks are obsolete and will be replaced with “smart” meters over the next six months to modernize the system. By installing smart meters, the city is transitioning from a manual to an automated process that reads meters electronically by radio frequency waves.

What are radio frequency waves?

RF waves are a form of electromagnetic energy, which can be man-made or occur naturally. People use multiple devices every day that emit RF waves (i.e., microwave ovens, cell phones, computers, AM/FM radios, etc.), and the FCC sets limits and requires all RF communicating devices to be tested to ensure that they meet federal standards before authorizing their use in the public domain.

Addressing health concerns

The World Health Organization concluded that no adverse health effects have been demonstrated by exposure to low-level RF energy like those produced by smart meters. Smart meters emit a low level of radio frequency energy that is both FCC-approved and lower than the level of RF energy emitted by many devices used each day by millions of people (*please see the graph below*).

Radio Frequency Power Density Levels of Common Devices (in microWatts/cm²)

<u>Cell Phone – at ear</u>	Maximum..... ----- ----- ----- ----- ----- 5000 Minimum..... 1000
<u>Microwave Oven – 2 feet</u>	Maximum...200 Minimum...50
<u>WiFi Router / Computer</u>	Maximum...20 Minimum...10
<u>FM Radio / TV Broadcast</u>	Maximum...1.0 Minimum... 0.005
<u>Smart Meter – 10 feet</u>	Maximum... 0.100 Minimum... 0.100

About this figure: This figure depicts the radio frequency waves emitted by various common wireless devices. Source for starting measurements: Electric Power Research Institute (EPRI), Radio-Frequency Exposure Levels from Smart Meters: A Case Study of One Model (February 2011).