

# Elsinore Valley Municipal Water District

## Advanced Meters FAQs

Today's information technologies, such as cell phones, ATMs, and Wi-Fi, have greatly improved how we live and work. These same technologies are now being used to modernize water systems across the country. EVMWD's Advanced Meter technology enhances water resource management to ensure fiscal and environmental vitality for future generations.

### ABOUT ADVANCED METER READING

EVMWD's Advanced Meter Project involves the installation of state-of-the-art metering technology for residential and commercial water customers. New Advanced Meters are being installed throughout the EVMWD service area over the next two years.

An Advanced Meter consists of a low-powered communication device that's added to your current water meter. The Advanced Meter transmits hourly water usage information to the District's Customer Service Center, four times per day, over a secure communication network. Your water use is still measured the same way it is today, but with now near real time accuracy.

### ADVANCED METER BENEFITS

- **REDUCTION OF WATER LOSS** through the proactive identification of water leaks on customer service lines.



- **NEW ONLINE WATER MANAGEMENT TOOLS** will help you manage your household water use. You can also register to receive household water alerts, notifying you of leaks, continuous flow, or high water use via email or text message along with current bill cycle information.
- **BILL-TO-DATE INFORMATION** will be made available on a daily basis, giving you greater control over your monthly water bill. You can set a household threshold/budget for use (e.g., 5,000 gals.), and be notified if your water use is trending to exceed or surpass the threshold.
- **SAVE MONEY** by viewing your daily and hourly water use history with comparisons by day, week, month, or year, and supporting information such as weather trends. This enables you to better understand and make informed decisions about your household water use and water bill.
- **WATER ALERTS** can be automatically sent to you when continuous water flow is identified, which can often indicate a water leak. This feature will help you save money and prevent property damage as a result of undetected leaks.



**ELSINORE  
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MUNICIPAL WATER DISTRICT

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### THE INFORMATION WE COLLECT

Modernizing the water system with an “Advanced Meter” means adding a low powered communication device to your water meter. Your water meter will continue to work the same; Advanced Meters communicate the amount of water you use, not how you use it. Advanced Meters are not a surveillance device and only contain the meter identifier and water meter reading information. No customer-identifying information is stored in the Advanced Meter, nor is customer-identifying information transmitted across the network.

### ONCE INSTALLED ADVANCED METERS WILL....

- Electronically transmit water use data back to EVMWD’s Customer Service Center. This eliminates the need to send meter reads to your property, reducing CO2 emissions which directly reduces EVMWD’s carbon footprint.
- Monitor the operational health of the Advanced Meter to ensure the meter reading services are not interrupted. This has no impact on water service delivery.
- Transmit meter data across our secure network. Each Advanced Meter has a unique identification number which is associated with your water meter serial number. Address’ are validated numerous times to ensure accuracy and privacy before the data is used for billing. This process helps ensure you are billed correctly for your water use.

### WHAT YOU GET IN RETURN

The District has launched AquaHawk Alerting™, our customer online water usage analyzer tool. Once your Advanced Meter is installed, within 24 to 48 hours you can register to receive access to your water use information. By registering and providing your up to date contact information, you’ll be able to utilize the full benefits available from your new Advanced Meter.

### ADVANTAGES INCLUDE:

- Tools to monitor use.
- Identification of potential water leaks.
- Daily meter readings.

### PRIVACY OF CUSTOMER WATER USE DATA

EVMWD is committed to safeguarding customer privacy. We take all necessary and reasonable steps to ensure that the services we provide our customers are of high quality, easily available, and secure. Personally Identifiable Information, such as name, address, bill account number, or credit/collection information is not transmitted to or from the meter. For additional security, the data is transmitted over a privately licensed radio frequency (RF) channel, using technology that meets or exceeds current industry standards.

**For more details regarding the policies related to the installation of Advanced Meters, please review Section 3207 of EVMWD's Administrative Code available on EVMWD's website at [www.evmwd.com](http://www.evmwd.com).**

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### ENSURING SAFETY IN TECHNOLOGY

Advanced Meters communicate with EVMWD using a low-powered radio frequency (RF) to transmit water meter data to EVMWD's Customer Service Center. The technology products that EVMWD uses for its Advanced Meter project fully complies with U.S. Federal Communications Commission (FCC) guidelines for human exposure to RF energy.

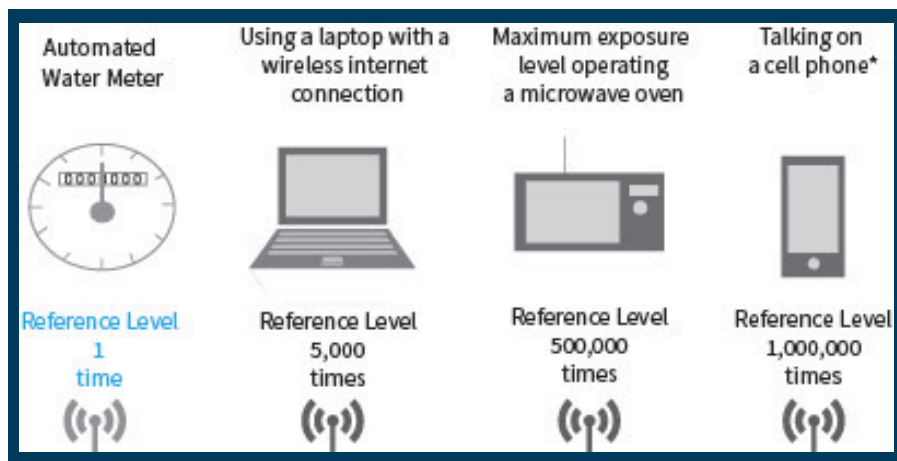
There are three key factors that contribute to RF exposure from a transmitting device:

**SIGNAL DURATION:** The Advanced Meter communication device turns on for a fraction of a second per day for a total of less than 2 minutes per year. You would need more than 375 years of

constant exposure to an Advanced Meter to receive a RF dose equivalent to one year of daily 15-minute cell phone conversations.

**RF ENERGY:** The RF energy emitted by an Advanced Meter is significantly less than that from common items used every day that emit RF, such as laptops, cell phones, remote car keys, wireless routers, and handheld radios, such as baby monitors.

**DISTANCE FROM RF SOURCE:** Advanced Meters will be located in the same place as the existing water meter. When the Advanced Meter is transmitting, the exposure level is thousands of times lower than the exposure limit set by the FCC.



### RADIO FREQUENCY EMISSIONS COMPARISON

#### THE BOTTOM LINE:

- Numerous studies conducted on the effects of RF on human health found no evidence that RF emissions from Advanced Meters pose any specific health risk.
- Advanced Meters comply fully with Federal Communications Commission (FCC) health and safety standards and emit RF signals far weaker than levels permitted by the FCC.
- For example, a person using a cell phone in their house can have as much as a million times more RF exposure than a person standing eight inches from an Advanced Meter when it is transmitting. Similarly, a person using a laptop computer can experience up to 5,000 times more RF exposure.

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### UNDERSTANDING RADIO FREQUENCY

Radio frequency (RF) describes the energy associated with electromagnetic waves. Any device that utilizes wireless technology produces RF emissions, so we encounter RF emissions daily from many sources. The RF exposure a person might encounter from an Advanced Meter in a typical household setting can be significantly less than RF signals a person may be exposed to from many common electronic devices found within the home.

### RF FREQUENTLY ASKED QUESTIONS

#### **Q. DO ADVANCED METERS EMIT DANGEROUS LEVELS OF RADIO FREQUENCY?**

A. Advanced Meters do not emit dangerous levels of RF. In fact, RF emissions from a typical Advanced Meter fall far below federal limits. The RF exposure a person might encounter from an Advanced Meter in a typical household setting can be significantly less than the RF signals they are exposed to from common electronic devices found within the home, such as cell phones, microwave ovens, Wi-Fi networks, and radio and television broadcasts.

Source: Electric Power Research Institute (EPRI), Radio Frequency Exposure Levels from Advanced Meters, November 2010.

#### **Q. WHAT DETERMINES A PERSON'S EXPOSURE TO RF?**

A. Exposure levels depend on signal strength, transmission duration, and distance. A report published by the California Council of Science and Technology (CCST) in 2011 included findings from the Electric Power Research Institute (EPRI) that the estimated maximum exposure level one foot from an Advanced Meter is far below the FCC guidelines; at a distance of about

10 feet, the power-density exposure lessens significantly.

Source: California Council of Science and Technology, "Health Impacts of Radio Frequency from Advanced Meters," January 2011.

#### **Q. WHAT ARE THE HEALTH IMPACTS OF RF AND ADVANCED METERS?**

A. Scientific panels and government authorities throughout the world have conducted numerous studies on the effects of RF on human health and found no evidence to suggest that RF emissions, from Advanced Meters, pose any specific health risk.

#### **Q. ARE THERE GOVERNMENT HEALTH-BASED STANDARDS FOR EXPOSURE TO RF EMISSIONS?**

A. Yes. The National Environmental Policy Act of 1969, among other rulings, requires the Federal Communications Commission (FCC) to evaluate the effect of emissions from FCC-regulated transmitters on the quality of the human environment. In 1996, the FCC adopted the National Council on Radiation Protection and Measurements' recommended "maximum permissible exposures limits" for field strength and power density for transmitters operating at frequencies of 300 kHz to 100 GHz where Advanced Meters operate.

#### **Q. DO ADVANCED METERS USE RADIO FREQUENCIES REGULATED BY THE FCC?**

A. Yes. These frequencies are called industrial, scientific, and medical (ISM) radio bands. The FCC designates the ISM frequency bands for equipment and appliances that generate and use RF energy. The FCC opened these frequency ranges for wireless communications in 1985 and has experienced a steadily increasing stream of devices occupying the bands.