

Well Metering Standards and Installation Guidelines

For the Paso Robles Groundwater Basin and The Nipomo Mesa Water Conservation Area

The County's Building and Construction Ordinance (Title 19 Section 19.07.042) requires meters for wells associated with new development in the Paso Robles Groundwater Basin or the Nipomo Mesa Water Conservation Area.

(5) Water Meter Installation and Reading.

- i. All new or existing wells that serve new development that overlie or use water from the Paso Robles Groundwater Basin (excluding the Atascadero Sub-basin) or the Nipomo Mesa Water Conservation Area must have a well meter installed. The meter shall be used to measure all groundwater used from that well.
- ii. Meter installation must be verified by the County Public Works Department prior to building permit issuance. The configuration of the installation shall conform to the Water Well Metering Standards and Installation Guidelines set forth by the Department of Public Works and incorporated into the Public Improvement Standards.
- iii. Property owners or responsible party designated by the property owner must read the water meter and record the water usage on or near the first day of the month. These records must be maintained by the property owner or responsible party and may be subject to inspection only by code enforcement pursuant to a violation investigation.

In addition, the County's Land Use Ordinance (Title 22 Section 22.30.304) requires meters for wells serving sites associated with an Ag Offset Clearance:

2. Metering and Monitoring. All new or existing wells that serve sites associated with an Agricultural Offset Clearance application must have a well meter installed and verified prior to final inspection. No new or expanded irrigated agriculture shall occur until final inspection has been completed. The following requirements apply to all issued Agricultural Offset Clearances:
 - i. Within 30 days of installation of a well for which a permit has been issued pursuant to Chapter 8.40 of the County Code, or prior to final inspection, whichever is applicable, meter installation must be verified by the County Public Works Department. The configuration of the installation shall conform to the Water Well Metering Standards and Installation Guidelines set forth by the Department of Public Works and incorporated into the Public Improvement Standards.
 - ii. Property owners or a person designated by the property owner must read the water meter and record the water usage on or near the first day of the month. These records must be maintained by the property owner and may be subject to inspection only by code enforcement pursuant to a violation investigation.

To comply with these requirements, applicants for new development or new irrigated agriculture will need to have a meter installed in accordance with the standards below, and to schedule an inspection with Public Works to verify installation prior to final planning inspection.

WELL WATER METERING TECHNICAL STANDARDS

The basic standards shall be:

1. The type of metering device shall be in accordance with standards established by the American Water Works Association (AWWA) and approved by the Utilities Division Manager or designee in advance of installation. In addition, "wet dial face" meters are not permitted.
2. The property owner where any well requiring a metering device is located shall be responsible for operation and maintenance of said device, including accuracy of the meter in accordance with AWWA Standards. The County shall not be responsible for operation and maintenance of these devices.
3. Metering devices shall be constructed in accordance with AWWA Standards. The County of San Luis Obispo Public Works Department Utilities Division maintains a list of water meter manufacturers that are satisfactory to the County (Attachment A).
4. Metering device calibration shall be performed in accordance with AWWA Standards and/or manufacturer recommendations and at the request of the Utilities Division Manager or designee.
5. Metering devices shall be installed in accordance with AWWA Standards and/or manufacturer recommendations. The following standards and guidelines are provided to assist with installation:
 - a. The metering device shall be situated such that all water produced from the well is measured.
 - b. The metering device shall be configured to provide a full flow of water in the pipe at the metering device under all flow conditions.
 - c. A minimum of eight diameters of straight pipe upstream and downstream of the centerline of the metering device (i.e. no bends or valves) shall be provided to limit turbulence at the metering device. Exceptions can be made if it can be demonstrated that the metering device is installed according to the manufacturer's recommendations.
 - d. The specified flow range of the metering device shall be consistent with the range of flows from the well.
 - e. The metering device should be installed in accordance with good practices with sufficient space provided to allow access for inspection and testing as may be deemed necessary.
 - f. If solid material (e.g. silt, sand, rust particles, etc.) is present in the discharge from the well, a strainer or filter should be installed in the pipe upstream of the meter to avoid fouling of the metering device.
 - g. The metering device and discharge line shall be protected from freezing.
 - h. Appropriate fittings should be used to allow easy installation and maintenance of the metering device.
 - i. The metering device should be installed by a qualified, experienced professional.

WATER METER MANUFACTURERS SATISFACTORY TO THE COUNTY OF SAN LUIS OBISPO PUBLIC WORKS DEPARTMENT UTILITIES DIVISION

The County Of San Luis Obispo Public Works Department Utilities Division (Public Works Department) requires that all water meters that come from manufacturers meet or exceed accuracy standards established by the American Water Works Association (AWWA). The water meter shall also be equipped with a totalizer which shall only be susceptible to correction by changing mechanical gear equipment. "Wet dial face" meters are not permitted.

Water meter manufacturers that are satisfactory to the Public Works Department include but are not limited to:

- Badger Meter, Inc.
- McCrometer, Inc.
- Sensus
- Sparling Instruments, LLC