

COUNTY OF SAN LUIS OBISPO Department of Public Works

John Diodati, Interim Director

July 29, 2021

PROCEDURAL MEMORANDUM 0-10

TO: All Division Heads

All Utilities Division Personnel

All Water Resources Division Personnel

FROM: Mark Chiaramonte, Utilities Division Manager

Courtney Howard, Water Resources Division Manager

SUBJECT: Well Water Metering Standards and Installation Guidelines

PURPOSE

Provided below in Attachment A are the water meter technical standards and installation guidelines that shall be followed whenever metering of a water well is required by the County of San Luis Obispo or San Luis Obispo County Flood Control and Water Conservation District. This includes, but is not limited to, the requirements associated with the following:

1) County of San Luis Obispo Ordinance No. 3246, 2) Nacimiento lakeside water users, 3) County of San Luis Obispo Ordinance No. 2343, 4) all others.

BACKGROUND

County of San Luis Obispo Ordinance No. 3246

Under Ordinance No. 3246, water meters must be installed on all wells on properties with issued Offset Clearances. Ordinance 3246, Section 7.A.2.b states:

"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 building inspection, whichever is applicable, evidence shall be submitted to the Public Works Director that the property owner has installed a meter on the well serving the use to measure all groundwater used from that well. The configuration of the installation shall conform to a drawing prepared by the property owner and shall conform to the technical standards set forth by the Public Works Director."

The Planning Department provides the requirement to put the meter in (e.g., adds it to the list of the applicant's "to-dos", provides Attachment A and the ordinance excerpt above) when an applicant meets the qualifications for the requirement (e.g., when the applicant initiates the building permit process and/or offset clearance permit in the Paso Basin or Nipomo Conservation Area). Compliance with this ordinance is managed by the Water Conservation Programs staff person in the Planning Department (waterprograms@co.slo.ca.us). The Planning Department (typically the person assigned to the permitting process for the development, or Water Conservation Programs staff for Agricultural Offsets) sends the evidence submitted (e.g., picture of meter configuration and installation, completed checklist and copy of manufacturer's recommendations) to PW.WR.TechUnit to review and approve if there is a concern about the evidence. Sometimes the applicant contacts Public Works directly; they should be directed to contact PW.WR.TechUnit and waterprograms@co.slo.ca.us.

Nacimiento Lakeside Water Users

Under the current San Luis Obispo County Flood Control and Water Conservation District policy for Nacimiento lakeside users, property owners submitting well permit applications shall enter into an Agreement for the Sale of Nacimiento Water (Agreement). The Agreement states:

"Water furnished by the facilities provided by BUYER shall be metered in a manner approved by the Director of Public Works at locations mutually agreeable to the two parties. The metering equipment shall be maintained by the BUYER in good working order at all times; and all costs of said equipment, including the installation, operation, maintenance, repair, and replacement thereof, shall be borne by the BUYER."

The Utilities Division Program Manager receives an applicant referral from Environmental Health Services when the subject property of a well permit is located within one mile of the high-water mark of the lake. When the subject property meets certain criteria, a Lakeside User Agreement and installation of a metering device is required. Compliance with the Agreement and metering evidence is managed by the Utilities Division staff.

County of San Luis Obispo Ordinance No. 2343

Under Ordinance No. 2343, the county engineer may require that a well permit applicant participate in a water monitoring program and install a water meter on the well associated with the subject well permit. Ordinance No. 2343 § 3 states:

"In certain areas of the coastal zone established by the California Coastal Act of 1976, groundwater is limited, and extraction must be monitored to satisfy the requirements of the Coastal Act. All water well permit applications within the coastal zone shall be reviewed by the county engineer to determine if participation in a water monitoring program is necessary to assure records are available for use in the resource management system. The manner in which a permit applicant shall participate in the monitoring program, including the frequency and type of reporting shall be determined by the county engineer."

The Planning Department or Environmental Health provides the requirement to be evaluated for inclusion in a water monitoring program (e.g., adds it to the list of the applicant's "to-dos" and the ordinance excerpt above) when an applicant meets the qualifications for the requirement (e.g., when the applicant applies for a permit to drill a well in the coastal zone). Planning, Development Services, Environmental Health and/or the applicant contact PW.WR.TechUnit to initiate the review process. The review process for the Tech Unit to use is located at G:\WR\TechUnit\xGroundwater\Well-Referral.

All others

Under any other situations where metering of a private water well is required by the County of San Luis Obispo or San Luis Obispo County Flood Control and Water Conservation District, these water meter technical standards and installation guidelines shall be followed.

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Attachment A

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. The metering device shall be installed in accordance with the manufacturer's recommendations. In the absence of the manufacturer's recommendation, 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.
 - 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.
- j. Upon completion of installation, each metering device shall be inspected by County staff.

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

Inspection Checklist

Well Meter Installation Verification Checklist			
Permit Number		Inspection date	
APN		Inspector	
Address			
City			
Meter Brand			
Diameter			
Meter measures all water from the well.			
Meter configured to provide full flow of water in pipe at all flow conditions.			
Meter install in accordance with the manufacturer's recommendations.			
Meter consistent with range of flows from well.			
Sufficient space for inspections and testing.			
Protection from freezing.			

Once approved - approve on Energov; and email waterprograms@co.slo.ca.us

Notes:

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