



COUNTY OF MONTEREY HEALTH DEPARTMENT

Elsa Jimenez, Director of Health

Administration
Behavioral Health

Clinic Services
Emergency Medical Services
Environmental Health/Animal Services

Public Health
Public Administrator/Public Guardian

Nationally Accredited for Providing Quality Health Services

Application for Source Capacity Test

Test site address: _____

APN: _____ Related Planning Permit #: _____ Well Permit # _____

Billing Address: _____

Property Owner: _____ Phone/Address: _____

Responsible Party: _____ Phone/Address: _____

Contractor: _____ Phone/Address: _____

Contractor's qualifications: _____

Purpose of test: Water System Single Family Dwelling Commercial Subdivision Irrigation
 MPWMD distribution permit Other, explain _____

Is there another well within 1000' of well? yes no Show wells on map with distance to well

If the well is proposed to serve a water system, what is the proposed number of connections? _____
(Connections include all habitable structures, including caretaker and senior units - See page three for capacity requirements)

Proposed discharge rate (gpm): _____ Pump Specifications: _____ Pump depth: _____

Requested test start date and time: _____ (Subject to availability. Wells in non-alluvial materials shall only be tested during August, September, and October and shall start on a Monday or Tuesday between 9 a.m. and 2 p.m. If it is proposed to pump multiple wells at the same time, complete an application for each well)

Alternative requested test start dates: _____

Proposed test duration 8 hrs (alluvial only) 72 hrs (non-alluvial formations)
 24 hrs (alluvial only) 10 days (non-alluvial formations)

Include the following documents with the application (see page 2 for test set-up requirements):

1. Map and directions to test site (include location of test well and all wells within 1000')
2. Well completion report/drillers log (Please note that if well does not meet current construction standards, it may not be able to be used for a water system or subdivision with individual wells. Minimum construction standards include a minimum of a 50' seal. Wells near the end of their useful life may also not be used for subdivisions or new water systems).
3. Prepayment of the Department's current rate of \$657. Time spent in addition to 4 hours will be billed at the completion of the test at the Department's current hourly rate of \$162/hr.
4. Wells that will serve a public water system have additional requirements shown on page 2. These systems serve at least 25 people at least 60 days per year or 15 residential service connections.

I declare that all information in this application is correct and I hereby agree to comply with all applicable requirements in the Monterey County Health Department, Bureau of Environmental Health's Source Capacity Testing Procedures.

SIGNATURE OF PROPERTY OWNER
X _____ Date _____
Print _____

SIGNATURE OF CONTRACTOR
X _____ Date _____
Print _____

Application for source capacity test, page 2

Test Set-up Requirements for ALL Wells:

1. Well shall be equipped with a meter that measures instantaneous and total flow. Tests conducted on wells that produce less than 10 gpm shall be equipped with a meter with 1 gpm increments.
2. Discharge water shall be managed to prevent recharge of the well during the testing/recovery period and shall not be allowed to pond/percolate within 200 feet of the well. For a well to discharge into a storm drain there must be no history of contaminants in the area. The risk of erosion must be minimal and not allow sediment to be transported into the storm drain. If there is already sediment in the curb or catch basin, it should be removed prior to beginning the test. The discharge should be run through some type of filter such as a sediment sock or gravel bag berm.
3. If multiple proposed production wells for the same water system are located within:
 - a. 500 feet of each other in a non-alluvial formation, the wells shall be pumped simultaneously in order to receive source capacity credit for both wells.
 - b. 300 feet of each other in an alluvial formation, the wells shall be pumped simultaneously in order to receive source capacity credit for both wells.
4. If there is a nearby well within 1000 feet on the same or neighboring parcel, the well should be monitored for drawdown as the source well is tested.
5. Well shall be equipped with a sounding tube.
6. The sounding line shall be clearly marked with a minimum of 10-foot intervals. The sounding line will be checked before it's lowered into the well to verify starting measurement.
7. For the purpose of obtaining an accurate static water level value, at least twelve hours before beginning the test, pump the well at the proposed pump discharge rate for no more than two hours, then discontinue pumping.

Public Water System Additional Requirements:

Include the additional following documents for wells that will serve a noncommunity or community public water system:

1. A copy of a United States Geological Survey 7 ½-minute topographic map of the site at a scale of 1:24,000 or larger (1 inch equals 2,000 feet or 1 inch equals less than 2,000 feet) or, if necessary, a site sketch at a scale providing more detail, that clearly indicates:
 - a. The well discharge location(s) during the test;
 - b. The location of surface waters, water staff gauges, and other production wells within a radius of 1000 feet;
2. For wells located in or having an influence on the aquifer from which the new well will draw water, a description of the wells' operating schedules and the estimated amount of groundwater to be extracted, while the new well is tested and during normal operations prior to and after the new well is in operation;
3. A description of the surface waters, water staff gauges, and production wells-shown in 1b.
4. A description of how the well discharge will be managed to ensure the discharge doesn't interfere with the test;
5. A written description of the aquifer's annual recharge.

Required Source Capacity for New Development

Non-Residential¹

- Provide engineered calculations using similar size/type system or water demand charts.

Application for source capacity test, page 3

Required Source Capacity for New Development, cont.

Residential²

<u>Type of System</u>	<u>Capacity Needed¹</u>	
Private Well (unshared)	3 gpm	
2 connections	6 gpm	
3 connections	9 gpm	
4 connections	12 gpm	
	<u>Alluvial</u>	<u>Non-Alluvial</u>
5 connections	13 gpm	15 gpm
6 connections	13 gpm	18 gpm
7 connections	13 gpm	21 gpm
8 connections	13 gpm	24 gpm
9 connections	13 gpm	27 gpm
10 connections	14 gpm	30 gpm
11 connections	14 gpm	33 gpm
12 connections	14 gpm	36 gpm
13 connections	14 gpm	39 gpm
14 connections	14 gpm	42 gpm
≥15 connections (metered)	1 gpm/conn ²	1 gpm/conn ^{2,3}

¹The minimum required source capacity calculations must include the 25/50% policy for all Public Water System utilizing a well in a non-alluvial formation. For example, a business with a non-alluvial well that needs 10 gpm must have a well that is credited to produce 40 gpm.

²The minimum required source capacity for ≥15 connections is 1 gpm/connection unless existing usage data is available and calculations are done according to Section 64554 of Title 22 of the California Code of Regulations (see requirements on next page).

³The 25/50% credit policy does **not** apply to wells in non-alluvial formation that will serve 1-14 residential connections since the minimum capacity already addresses the concern that many non-alluvial wells lose production over time. The 25/50% credit policy **does** apply to wells in non-alluvial formation that will serve 15 or more residential connections. The 1 gpm/residential connection is the amount required all the approved well yield has been appropriately reduced for non-alluvial wells.

Additional Requirements (based on Chapters 15 and 19 of the Monterey County Code and Title 22 of the California Code of Regulations)

- New community water systems (serves 15 or more residences) are required to have two sources of supply.
- New community water systems are required to meet maximum day demand with the highest producing source offline
- All water systems with treatment are required to size the treatment facility to produce at least maximum day demand
- All water systems with treatment are required to increase the source capacity to meet maximum day demand after subtracting losses from the treatment facility (i.e., backwash, brine, filter-to-waste)

Section 64554 of Title 22 of the California Code of Regulations for public water systems (15 or more connections).

(a) At all times, a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD). MDD shall be determined pursuant to subsection (b).

(3) Both the MDD (max day demand) and PHD (peak hourly demand) requirements shall be met in the system as a whole and in each individual pressure zone.

Application for source capacity test, page 4

Section 64554 of Title 22 of the California Code of Regulations, cont.

(b) A system shall estimate MDD and PHD for the water system as a whole (total source capacity and number of service connections) and for each pressure zone within the system (total water supply available from the water sources and interzonal transfers directly supplying the zone and number of service connections within the zone), as follows:

- (1) If daily water usage data are available, identify the day with the highest usage during the past ten years to obtain MDD; determine the average hourly flow during MDD and multiply by a peaking factor of at least 1.5 to obtain the PHD.
- (2) If no daily water usage data are available and monthly water usage data are available:
 - (A) Identify the month with the highest water usage (maximum month) during at least the most recent ten years of operation or, if the system has been operating for less than ten years, during its period of operation;
 - (B) To calculate average daily usage during maximum month, divide the total water usage during the maximum month by the number of days in that month; and
 - (C) To calculate the MDD, multiply the average daily usage by a peaking factor that is a minimum of 1.5; and
 - (D) To calculate the PHD, determine the average hourly flow during MDD and multiply by a peaking factor that is a minimum of 1.5.
- (3) If only annual water usage data are available:
 - (A) Identify the year with the highest water usage during at least the most recent ten years of operation or, if the system has been operating for less than ten years, during its years of operation;
 - (B) To calculate the average daily use, divide the total annual water usage for the year with the highest use by 365 days; and
 - (C) To calculate the MDD, multiply the average daily usage by a peaking factor of 2.25.
 - (D) To calculate the PHD, determine the average hourly flow during MDD and multiply by a peaking factor that is a minimum of 1.5.
- (4) If no water usage data are available, utilize records from a system that is similar in size, elevation, climate, demography, residential property size, and metering to determine the average water usage per service connection. From the average water usage per service connection, calculate the average daily demand and follow the steps in paragraph (3) to calculate the MDD and PHD.

(6/08,6/09,6/11,rev.7/7/17, 7/13/18, 7/19)