

MONTEREY COUNTY

**DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH BUREAU
1270 Natividad Road
Salinas, CA 93906
(831) 755-4507**



WATER WELL CONSTRUCTION DENIAL

WELL PERMIT #17-12919

SITE LOCATION: ETS-20 Marina, Ca

OWNER: Bill Armstrong

MAILING ADDRESS: 270 River Road

CITY: Salinas, CA 93908

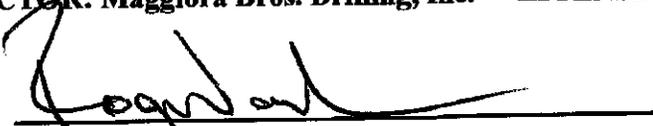
DRILLING CONTRACTOR: Maggiora Bros. Drilling, Inc. LICENSE: 249957

DENIAL DATE: 12/7/2017

APN: 175-011-050-000

PHONE: (831) 484-0800

DENIAL ISSUED BY:


Roger Van Horn, R.E.H.S.

REASON FOR DENIAL:

1. Monterey County Water Resources, in its role as the technical consultant to Monterey County Environmental Health Bureau, has recommended that a denial for this well application be issued.
2. Pursuant to Monterey County Code 15.08.060 – **Permit-Issuance or Denial**; When the Health Officer issues a permit pursuant to this Chapter, he or she may condition the permit in any manner he or she deems necessary to carry out the purposes of this Chapter. Conditions may include, but are not limited to, proper construction, destruction, reconstruction, sealing methods quantity and quality testing methods as the Health Officer finds necessary to carry out the purposes of this Chapter. The Health Officer shall deny an application for a permit if, in his or her judgment, its issuance would tend to defeat the purpose of this Chapter.
3. Pursuant to Monterey County Code 15.08.160 – **Appeals**: **A.** Any person whose application for a permit has been denied, or granted conditionally, or whose permit has been suspended or revoked, may appeal to the Board of Supervisors, in writing, within ten (10) days after any such denial, conditional granting, suspension, or revocation. Such appeal shall specify the grounds upon which it is taken, and shall be accompanied by a filing fee as set forth herein. The Clerk of the Board shall set such appeal for hearing at the earliest practicable time, and shall notify the appellant and the Health Officer, in writing, of the time so set at least five days prior to the hearing. **B.** After such hearing, the Board of Supervisors may reverse, wholly or partly, or may modify the order or determination appealed from. **C.** The filing fee may be set from time to

Well Denial Permit # 17-12919

Owner: Bill Armstrong

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time by the Board of Supervisors by ordinance (Fee Ordinance: Monterey County Code Section 10.08.050BB).

4. Monterey County Water Resource Agency Well Application Review Form with their reasoning's for the denial are attached, **Exhibit A**.

END

MONTEREY COUNTY WATER RESOURCES AGENCY

WELL APPLICATION REVIEW

Permit Type: Construction

Permit #17-12919

| | | |
|---|---|---|
| Owner Name: Bill Armstrong Armstrong Sandhill Ranch, LLC | Hydrologic Subarea: 180/400 Foot Aquifer Subbasin – Deep Aquifers | Proposed Borehole Depth (ft.): 1,960 |
| Address: 270 River Road, Salinas, CA | APN: 175-011-050-000 | Proposed Sealing Depth (ft.): 1,160 |
| Well Address: Marina, CA (ETS-20 site) | TRS number: 14S/02E-19G | Proposed Well Perforation Intervals (ft.): 1,220 to 1,960 |
| Date Submitted To Agency: 10/20/2017 | Driller/Contractor: Maggiora Bros. Drilling, Inc. | Proposed Production Casing Diameter (in.): 16 |
| Date Application Received: 10/19/2017 | Drilling Method: Reverse rotary Ground Surface Elevation (ft.): 60 | Proposed Pumping Rate (gpm): 2,500 Intended Use: Agricultural Irrigation |

The Water Resources Agency recommends denial of well construction permit #17-12919 (Armstrong Sandhill Ranch, LLC) for the following reasons:

1. The proposed high capacity¹ well would extract water from the Deep Aquifers of the 180/400 Foot Aquifer Subbasin.
 - a. If the proposed well is operated in a manner similar to the other four currently operating wells owned by Armstrong Sandhill Ranch, LLC and/or associated with the Ramco Enterprises/Sun Berry Growers ranches in the close vicinity of this proposed well, it has the potential to pump 350 acre-feet of water annually from the Deep Aquifers. This would increase the total water pumped from wells in the Deep Aquifers in the Area of Impact in 2016 by 7%.
2. The proposed well is located approximately 0.5 miles from an existing well in the Deep Aquifers that is known to have recently failed. While the cause of the well failure has not been determined, water quality data indicate that the failed well has been hydraulically connected to the Pressure 400-Foot Aquifer, allowing the movement of impaired groundwater into the Deep Aquifers. Any new well installed in the Deep Aquifers where there is seawater intrusion in the overlying aquifers poses a similar risk to the resource.
3. Existing studies² suggest that the predominant source of recharge to the Deep Aquifers is leakage from the overlying Pressure 180-Foot and Pressure 400-Foot Aquifers, both of which have documented seawater intrusion at the proposed well site.
4. Increased pumping from the Deep Aquifers, which will occur if this well is installed, has the potential to induce additional leakage of impaired groundwater from the overlying aquifers.
 - a. The proposed well is the eighth well that has been applied for on parcels owned by Armstrong Sandhill Ranch, LLC in the Marina area, or on adjacent parcels owned by Valle Del Sol Properties LLC, since 2008. All of the wells are located on parcels that are being used to grow strawberries by Ramco Enterprises dba Sun Berry Growers³. Six of the eight wells have been constructed and a permit has been issued for the seventh well. This permit application represents the eighth well.

¹ The 2010 Monterey County General Plan defines a "high capacity well" as a well that has a flow over 1,000 gallons per minute.

² Feeney, M.B. and L.I. Rosenberg (2003) *Technical Memorandum – Deep Aquifer Investigation – Hydrogeologic Data Inventory, Review, Interpretation, and Implications* and WRIME (2003) *Marina Coast Water District Deep Aquifer Investigative Study*.

³ Data on operator and crop was obtained from the 2014 Ranch Maps published by the Monterey County Office of the Agricultural Commissioner and through observation of satellite imagery.

5. Isotope analysis of water from the Deep Aquifers indicates that it was recharged thousands of years before the present day.⁴ Though stored groundwater may not be the primary source of current extractions from the Deep Aquifers, continued pumping of this "old" water represents mining of a groundwater resource.
6. Until an investigation can be completed, insufficient data exists on the hydraulic properties and long-term viability of the Deep Aquifers to allow for knowledge-based water resource planning.⁵

The Water Resources Agency makes this recommendation to the Monterey County Health Department - Environmental Health Bureau in its role as a technical consultant to the well permitting program.⁶ The Water Resources Agency finds that recommending denial of this well construction permit supports the purpose of Monterey County Code Chapter 15.08 and is consistent with Policy PS-3.5 of the 2010 Monterey County General Plan.

Reviewer: Howard Franklin, PG #8456
Senior Hydrologist

Date: December 6, 2017



⁴ Hanson, R.T. et al. (2002) *Geohydrology of a Deep-Aquifer System Monitoring-Well Site at Marina, Monterey County California*. U.S. Geological Survey. *Water Resources Investigations Report 02-4003*.

⁵ Monterey County Water Resources Agency (2017) *Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin – Special Reports Series 17-01*.

⁶ The Water Resources Agency role in the well permitting program is discussed in the *Delineation of Responsibility for Water Management Between Division of Environmental Health & the Monterey County Flood Control and Water Conservation District* (1990).