MONTEREY COUNTY

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

WATER WELL CONSTRUCTION DENIAL

WELL PERMIT #17-12916 | **DENIAL DATE: 12/7/2017**

SITE LOCATION: Cooper Rd & McFadden Rd | **APN: 414-011-001-000**

OWNER: General Farm Investment, Chris Bunn | **PHONE: (831) 424-7923**

MAILING ADDRESS: P.O. Box 247

CITY: Salinas, CA 93902

DRILLING CONTRACTOR: Alsop Pump. | **LICENSE: 569945**

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 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 #17-12916

Owner Name: General Farm Investment Chris Bunn	**Hydrologic Subarea:** 180/400 Foot Aquifer Subbasin – Deep Aquifers	**Proposed Borehole Depth (ft.):** 1,700
Address: PO Box 247, Salinas, CA 93902	**APN:** 414-011-001-000	**Proposed Sealing Depth (ft.):** 860
Well Address: Cooper Rd & McFadden Rd	**TRS number:** 14S/02E-22J	**Proposed Well Perforation Intervals (ft.):** 900 to 1,600
Date Submitted To Agency: 10/13/2017	**Driller/Contractor:** Alsop Pump	**Proposed Production Casing Diameter (in.):** 16
Date Application Received: 10/13/2017	**Drilling Method:** Reverse rotary	**Proposed Pumping Rate (gpm):** 1,800
	Ground Surface Elevation (ft.): 28	**Intended Use:** Agricultural irrigation

The Water Resources Agency (Agency) recommends denial of well construction permit #17-12916 (General Farm Investment) for the following reasons:

1. The proposed high capacity[1] well would extract water from the Deep Aquifers of the 180/400 Foot Aquifer Subbasin at a rate of 1,800 gallons per minute (per the permit application). Based on reported pumping data from other wells on the same ranch, annual extractions could total approximately 300 acre-feet per year. This represents an increase of approximately 6% in total annual pumping from wells in the Deep Aquifers within the Area of Impact.

2. The Agency has documented seawater intrusion in Pressure 180-Foot Aquifer overlying the proposed well site and in the Pressure 400-Foot Aquifer at an expanding "island" less than 1,000 feet east of the proposed well site, which is a direct result of vertical migration of seawater intrusion. The geographic extent of areas impaired by seawater intrusion in both the Pressure 180-Foot and Pressure 400-Foot Aquifers will continue to expand with the additional pumping from the proposed well.

3. Existing studies[2] suggest that the predominant source of recharge to the Deep Aquifers is leakage from the overlying Pressure 180-Foot and Pressure 400-Foot Aquifers.

    a. Increased pumping from the Deep Aquifers, which will result from installation of this well, has the potential to induce additional leakage of impaired groundwater from the overlying aquifers.

    b. The proposed well is located in an area where the aquitard between the Pressure 180-Foot and Pressure 400-Foot Aquifers is thin or discontinuous.[3] Even if the proposed well is constructed in accordance with existing well standards, a thin or discontinuous aquitard enables the vertical migration of overlying groundwater to the Deep Aquifers. Groundwater in the overlying aquifers, at the proposed well site, has been impacted by seawater intrusion. Operation of a high capacity well in close proximity to an area with a thin or discontinuous aquitard will create a localized downward gradient into the Deep Aquifers, further enabling the movement of impaired groundwater.

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[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] Todd, David Keith (1989) *Sources of Saline Intrusion in the 400-Foot Aquifer, Castroville Area, California* and Kennedy/Jenks Consultants (2004) *Hydrostratigraphic Analysis of the Northern Salinas Valley*.

4. Isotope analysis of water from the Deep Aquifers indicates that it was recharged thousands of years ago.[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.

5. 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).