

July 16, 2004

Mr. Doug Johnston  
Planning and Zoning Director  
Torrance County  
P.O. Box 48  
Estancia, NM 87016

**CERTIFIED MAIL RETURN RECEIPT**  
**ANTICIPATED VIA FAX**

**Re: Cattle Country Subdivision**

Dear Mr. Johnston:

On June 15, 2004, the Office of the State Engineer (OSE) received additional/amended documents regarding "Cattle Country", a Type Two Subdivision. This office had withheld a positive opinion, on April 14, 2004, due to the fact that the developer had failed to prove water availability in accordance with Section 5.4 of the Torrance County Subdivision Regulations. Also, this office had commented on the fact that the results of the water demand analysis were not reflected in the Disclosure Statement.

The proposal is a request to subdivide 321.65 acres of land into 67 residential lots and 22 commercial lots. The proposed subdivision is located approximately six and a half miles east of Moriarty, immediately south of State Road 333, within the S ½ of Section 18, Township 9 North, Range 10 East, NMPM. Water will be supplied by a new community water system.

It is the opinion of this office that the subdivider has now proved water availability for the required 70 years by submitting a 24-hour pump test conducted at well E-1679-S. A positive opinion is therefore issued.

However, the lack of characterization of the developer's other three (3) existing wells as viable source of water is of concern to the OSE (should there be acceptance issues related to the quality of the water produced by the tested well).

**WATER DEMAND ANALYSIS AND CONSERVATION**

The maximum annual water requirement for the residential lots has been quantified at 0.40 acre-feet per annum per parcel. This amount is now reflected under Item # 17 of the Disclosure Statement. Conservation measures are addressed by limiting outdoor water use to the irrigation of ≤ 800 square feet per lot.

With regard to the 22 commercial lots, Item # 17 of the Disclosure Statement now states that each lot is restricted to 1.22 acre-feet of water per annum. It further specifies that, if the water use is projected to be higher than the allotted amount, then the commercial enterprise must either purchase additional lots, or purchase and transfer additional water rights in sufficient quantity to offset the water use in excess of the allotted amount.

Please, be advised that the purchase of additional water rights does not allow an increased diversion from the subdivision wells without a permit to change point of diversion/purpose of use/place of use of the water rights approved by the OSE.

### **WATER AVAILABILITY ASSESSMENT**

The proposed water supply for this development is a new community water system. The developer is permitted to divert 53.5 acre-feet of water per annum from four existing wells (E-1679 thru E-1679-S-3), for subdivision, commercial, truck terminal, indoor horse arena and two mobile homes on 372.33 acres located in Section 18, Township 9 North, Range 10 East, NMPM.

Section 5.4 of the Torrance County Subdivision Regulations requires a geohydrology report to demonstrate that groundwater sufficient to meet the maximum annual water requirement of the subdivision is physically available and can be practically recovered to sustain the development for a continuous period of 70 years. The analyses must take into account the production of existing wells and demonstrate that the wells serving the subdivision, as proposed or as designed, will be capable of producing the full annual demand for at least 70 years.

This office had found two (2) major issues with the geohydrology report:

1. The report focused only on well E-1679-S (described as primary well in the proposal), and did not characterize the other three (3) supplemental wells.
2. The pump test was not conducted at a constant rate, and therefore the calculations of transmissivity and drawdown for 70 years were not found acceptable.

For details regarding the comments, please refer to the OSE letters dated October 21, 2003 and April 14, 2004.

In the latest submittal, data from a recent pump test conducted on well E-1679-S have been provided. The test, although conducted at pumping rate declining from 50 to 37.5 gpm, proves that well E-1679-S appears capable of producing the required amount for the required 70 years. The data have been reviewed by the OSE Hydrology Bureau (see the attached memorandum dated July 8, 2004).

The developer states, in page 3 of the latest proposal, that, because the proposed supply well is sufficient to supply the maximum amount of water needed, no backup well is proposed and no additional characterization is submitted. The developer also states that the backup supply will be a 120,000-gallon tank.

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This office does not agree on this assessment for the following reasons:

1. A storage tank should not be considered a backup supply in case the well fails, but an “aide” for peak hours demand, and/or for fire protection.
2. If the well fails, the 120,000-gallon tank (0.37 acre-feet) could provide water to the subdivision at full built-up only for two (2) days.

**CONCLUSION**

The applicant has met the minimum requirements set forth by Section 5.4 of the Torrance County Subdivision Regulations, and by the New Mexico Subdivision Act. Accordingly, a positive opinion is hereby issued. This opinion is based on well E-1679-S only.

In the event that there is an interruption in well E-1679-S service, or if the water quality does not meet US EPA and New Mexico drinking water standards, the applicant has not demonstrated water availability.

If you have any questions, please call me at (505) 827-4273.

Sincerely,

Mara Smith  
Water Use and Conservation Bureau

Enclosure

cc: John W. Longworth, OSE Water Use & Conservation Bureau Chief  
OSE Water Right Division, Albuquerque Office