

MEMO

TO: File 63-33468

FROM: CPadilla

DATE: May 23, 2011

RE: Licensing Review Memo, email regarding irrig. practices, & volume spreadsheet

Timeline:

Application Received: January 5, 2011

Permit Issued: April 6, 2011

Proof of Beneficial Use: May 13, 2011 (timely)

Field Examination: May 9, 2011

Point of Diversion: One well, ID #D0057848, serves the medical center for back-up purposes and for the irrigation of 1 acre.

Overlap Analysis of PD: No other rights are diverted from the PD associated with this right.

POU: The Pioneer Irrigation Dist. and the city of Caldwell service boundaries cover the medical center. No surface water is available to the POU and the city water primarily serves the medical center. The commercial purpose of this right is to provide back-up water in the event of an emergency, etc. It appears that the irrigation component of this right will be used in conjunction and may use this right entirely for irrigation.*

Volume and Diversion Rate: The field examiner provided water usage records for the medical center dating back to 2001. The volume recommended by the field examiner was derived from the usage records but was limited to one month. Since we are trying to ascertain an annual volume limit, it would be more accurate to use actual water usage over the development period. However, because the development period only spanned ~1month there is not enough information to assign an annual volume. I used the last year's water usage records and came up with 46 afa for a volumetric limit. I have attached a spreadsheet of the calculations.

The diversion rate was calculated using pump curves and the recommended amount of 0.17 cfs is acceptable as I conducted a hp equation calculation and came up with a figure very close:

$$\frac{0.7 \times 5\text{hp} \times 8.8}{230' + (2.31 \times 40\text{psi})} = 0.15 \text{ cfs}$$

*Note that the irrigation component of this water right will be used primary and the city water will be secondary as confirmed in the attached email.

Special Conditions: A condition will be added to the license that states the commercial use is for back-up water supply.

Amendment?: No.

Date	# of Days	Reading (converted to af)	Actual Reading
3/31/2011	30	3.79	1652
3/2/2011	29	3.40	1479
2/2/2011	29	3.29	1435
1/5/2011	15	3.58	1560
12/21/2010	48	3.77	1643
11/4/2010	31	3.77	1643
10/5/2010	25	3.89	1695
9/8/2010	35	4.66	2031
8/5/2010	29	4.03	1757
7/8/2010	35	4.61	2007
6/4/2010	29	3.64	1587
5/7/2010*	30	3.49	1521
Total	365	45.93	20010
*Previous recorded date is 4/8/2010			