

MEMORANDUM

TO: File 37-8857

FROM: Daniel Nelson – Staff Hydrologist

DATE: March 27, 2015

SUBJECT: Licensing Review for 37-8857

This is the licensing review of the field exam submitted by Sandy Hemenway formerly in our state office. The field exam was done in 2012. The system associated with this permit allowed water to be diverted from a well that supplies water to an semi-developed subdivision. The field exam has some issues that need to be addressed to prior to licensing of the permit.

Development of Permit:

The application for this permit was received by the Idaho Department of Water Resources (Department) on August 28, 1996. The permit was approved on December 13, 1996. An extension of time to provide proof was received on December 8, 1997, and the time to provide proof of beneficial use was extended until December 1, 1999. Proof of beneficial use was received on December 12, 1999 after the permit had lapsed. The permit was re-instated on January 21, 2000 with an advancement of the priority date to September 23, 1996. The Department received an assignment of permit to the current owners on May 23, 2005.

In the field exam report, Ms. Hemenway did state that the lots have all been stubbed into the system. The current tax lot information confirms that approximately 11 of the 62 lots are owned by other individuals. From the 2004 through 2013 aerial photos, there appears that only 2 homes have been constructed in this subdivision.

I am concerned that this permit was first approved in 1996 and there are only 2 homes constructed in this subdivision. Administrative processing memo states the following:

The stub-in practice was not applied in all subdivision development situations. For example, suppose the Department issued a permit for development of 100 homes in a subdivision and proof was submitted for 100 homes based on the stub-in practice. Many years later, the Department completes an exam and finds only 20 homes were built and using water. The remaining lots remained vacant and undeveloped except for the stubbed-in service line. The Department would only issue a license based on the actual diversion and use of water because sufficient time would have passed to complete development of the subdivision.

I spoke with Water Rights Bureau Chief, and he confirmed my suspicions. We are to follow the direction provided by Administrative Memo 18. We can license what has been developed, or the 2 homes that are constructed. The homes in the subdivision that are stubbed cannot be licensed, since there has only been two homes constructed in the subdivision in the 19 years since the permit was first submitted.

I have been instructed to license this permit for the amount of water that is allowed to be used for two domestic home with yards.

Diversion Rate:

Ms. Hemenway provided a theoretical calculation for the two wells on this system, since it was not operating at the time of the exam. She calculated the flow of Well #1 with a lift of 300 feet, but also stated that the pump was set at 273 feet. She stated that Well #2 had a lift of 270 feet. These two wells are approximately 475 feet apart, so I believe Ms. Hemenway transposed the two numbers on the first well. The lift on the first well should be 273 feet. This would change the theoretical for well #1 to the following:

$$(8.8 \times 10 \text{ Hp} \times 0.7 \text{ eff.}) / [273 + (110 \text{ psi} \times 2.31)] = 0.12 \text{ cfs}$$

This would allow a total system capacity of 0.21 cfs (Well #1 @ 0.12 cfs + Well #2 @ 0.09 cfs = 0.21 cfs total system capacity). The permit allowed a total of 0.48 cfs. We can allow up to 0.04 cfs for each home for in-house use and yard irrigation or 0.08 cfs (2 Homes X 0.04 cfs/home = 0.08 cfs). **The system can clearly supply the 0.08 cfs allowed for the two homes under this permit, therefore, I am recommending a diversion rate of 0.08 cfs for this permit.**

Diversion Volume:

Ms. Hemenway recommended the maximum amount of diversion rate for the entire subdivision in her field examination. However, we can only license this permit for two homes. Administrative Processing Memo 22 allows a maximum volume of 1.2 af per home in a subdivision. The volume allowed on these homes should be 2.4 af. The permit has a condition that limits the use per lot with a home to 13,000 gpd, so no volume will be needed on the license.

Place of Use:

Ms. Hemenway allowed a place of use including the entire subdivision as is proper if we were licensing the entire subdivision using the stub in rule. Since there are only 2 homes, I reduced the place of use to the two lots that have homes located on them.

Conditions:

Condition 2 (004) was carried forward to licensing. Condition 1 (01M) was updated to 01R since this permit is in Water District 37B. Condition R05 was added to show that this permit falls within the water district. Condition 3 was separated out to conditions X59, X60, X04, 070, and 071.