

Van Bussum, Monica

From: Ed Squires [ed@hydrologicinc.net]
Sent: Thursday, June 03, 2010 6:16 PM
To: Van Bussum, Monica
Subject: RE: 6-3-2010 RE: 63-31807 (Town Ranch LP) Licensing
Attachments: image001.jpg

Hydro Logic, Inc.

1002 W. Franklin St. Boise, ID 83702 (208) 342-8369 Fax: (208) 342-3100 Cell: (208) 631-6781

Monica,

There is definitely a domestic component for restrooms and drinking water for ~ 100 employees (in fact, this is a Public Drinking Water System) so we need to keep the domestic use.

Fire protection is still a large concern but I was under the impression that we did not need to state it. I would actually prefer it if we could include a fire protection use and there are several hydrants on the property that are fed by the wells.

As soon as the right is licensed, I will speak with my client about the need for a second transfer and I know he will follow the logic and get that accomplished.

Thank you.

Ed

From: Van Bussum, Monica [mailto:Monica.VanBussum@idwr.idaho.gov]
Sent: Thursday, June 03, 2010 5:03 PM
To: Ed Squires
Subject: RE: 6-3-2010 RE: 63-31807 (Town Ranch LP) Licensing

Hi Ed,

Your information about the PODs was helpful and I'll include a copy of the email in the file for future reference. I do have one more question. 63-31807 was permitted for fire protection, commercial and domestic. On page 6 of the field exam, only commercial is listed as a recommended use. However, in looking at your recommendations for conditions, I see you still have a domestic condition in there, so I assume you still want domestic listed as a use. Please confirm. Also, in your recommendations for conditions, you suggest the fire protection condition (condition #9 on the permit) can be removed. Does your client still want fire protection listed?

And it does look like a transfer will be needed for 63-31793 to move the POD.

I'm hoping to finalize the license (and licensing amendment for the POD) once I get your confirmation about purposes of use. Thanks!

Monica

From: Ed Squires [mailto:ed@hydrologicinc.net]
Sent: Thursday, June 03, 2010 2:25 PM
To: Van Bussum, Monica
Subject: 6-3-2010 RE: 63-31807 (Town Ranch LP) Licensing

Good afternoon Monica,

We may need to discuss this by phone but here is the short version (some of which I am sure you know):

- 1) Originally, and under the "moratorium/processing hold" in place at the time, Town Ranch acquired an irrigation water right (Renatta Ham – Stone Creek Turf Farm).
- 2) Town Ranch purchased 10 acres of water to cover the anticipated annual volume for its use.
- 3) The transfer added two new points of diversion in the NW SE and SW SE of Section 20.
- 4) The ten acres, of course, only equated to the diversion rate appurtenant to those ten acres; too small a rate to serve Town Ranch's use.
- 5) To cover the needed rate of diversion, I filed the Application For Permit for an increased diversion rate while keeping the annual volume the same.
- 6) The Application For Permit also requested two POD's in the the NW SE and SW SE of Section 20.
- 7) Two different points of diversion were originally requested because Town Ranch had not finalized the site plans at the time of the water right application.
- 8) In the end, Town Ranch did develop two POD's but both wells are in the same ¼ ¼ section (indeed, only ~ 25 feet apart).
- 9) Therefore, the answer to your question is that, for both water rights, there are two PODs and they are both in the same ¼ ¼ section and there are no other PODs.
- 10) It seems that the Permit can be easily changed in the process of licensing but, perhaps, the 63-31793 Licence will need to be transferred to reflect the change in PODs?

Please let me know your thoughts on this.

Ed

From: Van Bussum, Monica [mailto:Monica.VanBussum@idwr.idaho.gov]

Sent: Monday, May 24, 2010 11:25 AM

To: Ed Squires

Subject: 63-31807 (Town Ranch LP)

Hi Ed,

I am currently reviewing 63-31807 for licensing and just have a quick question. I see 63-31807 overlaps 63-31793. 63-31793 has PODs in Section 20 NWSE and SWSE. Your field exam will put two PODs for 63-31807 in Section 20 NWSE. Is one of those wells under 63-31807 the same as the well in NWSE for 63-31793? I am just trying to get the PODs in the right place for this.

Also, I will be sending an amendment to move one POD from the SWSE (as permitted for 63-31807) into the NWSE for licensing.

Thanks,

Monica

MONICA VAN BUSSUM

Sr. Water Resource Agent

Idaho Department of Water Resources

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March 27, 2003

Mr. Steve Lester
Water Rights Supervisor
State of Idaho Department of Water Resources
Western Regional Office
2735 Airport Way
Boise, Idaho 83705-5082

*From transfer application
for 63-31793
pages 11-13*

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JUN 23 2003

WATER RESOURCES
WESTERN REGION

Dear Steve:

This letter, which should be considered a part of the attached Application for Transfer of Water Right No. 63-8796 on behalf of my client Town Ranch LP., is intended to present an overview of the transfer application. In addition to this explanation of the details of the transfer, the Application consists of the following parts:

1. A completed and signed (by the Applicant) IDWR Application for Transfer form.
2. The Affidavit of Renata Ham for Water Rights Nos. 63-10566, 63-9972, and 63-8796.
 - a. Legal description of the property from which the water will be transferred.
 - b. Water Right License No. 63-8796 for the water being transferred.
 - c. Deed from Frank and Wyoma Ham to Gayle and Renata Ham.
 - d. Court Appointment of Personal Representative of Sheldon Gayle Ham.
 - e. 1987, 1994, 2000 aerial photos of beneficial use.
 - f. Water right assignments and quitclaim deeds for land and water rights.
 - g. Various other related documents.
3. A portion of a U.S.G.S Topographic Series map showing the proposed new Place of Use and nearby existing water wells.
4. A 1992 aerial photograph showing the new Place of Use and surrounding area.
5. A tabulation of selected data from all nearby existing water wells.
6. A check for \$290 to cover the IDWR processing fee.
7. This cover letter.

Overview of the new nature of use:

The transfer proposes to move 15 acres of water right No. 63-8796 to a new Place of Use and, in the process, to change the Nature of Use, Point of Diversion, and Period of Use. No expansion in the volumetric limitations of the water right are expected or intended. Right No. 63-8796 has previously been used for irrigation of turf grass at Stone Creek Turf Farm. The Applicant proposes to move the water right to property in Canyon County for the purpose of operating a concrete manufacturing plant. The nature of this use requires a relatively small volumetric quantity of water but a relatively high, but short lived, instantaneous rates of diversion. In other words, the concrete batching process requires that water additions to delivery trucks be as instantaneous as possible. Although the average daily water demand is estimated at only about 70 gpm, (or 140 gpm given about 100,000 gallons per day are required over an average day of 12-hour duration), discharge rates up to 900 gpm are necessary for short periods when the admixture is being batched into concurrently-filled mixer trucks. Because fire protection necessitates a high flow rate, and owing to problems related to cold weather conditions and freezing temperatures, the Applicant desires to utilize the aquifer for storage rather than an above-ground reservoir. Therefore, the Applicant intends to follow this transfer application with a Application for Permit to increase the instantaneous diversion rate to 2.0 cfs.

Duty of water/consumptive use:

Because the proposed new nature of use is essentially 100 percent consumptive, the Applicant understands that the duty of water, under its present irrigation use, will not be apportioned at the 4.5 acre feet per acre duty of the original water right. We have based our need calculations, on the past consumptive use for turf grass irrigation; on a consumptive use of 3.5 acre feet per acre. We have considered the proposed extension of the period of use as well as the non-consumptive portion of the original water right in our conversions as explained below:

Volumetric calculations:

The total quantity of water required annually is estimated according to the following assumptions:

A. Commercial:

- i. Concrete manufacturing.
 - a. Requires 30 gallons of water per yard of concrete mixed.
 - b. Maximum load is 10 cubic yards or 300 gallons of water per load.
 - c. Average load is 6 cubic yards or 180 gallons of water per load.
 - d. Each truck uses an additional 150 gallons of wash-down water per load.
 - e. Maximum number of truck loads per day is estimated at 150.
 - f. Using the average (6 yd³) load: 150 (maximum) loads per day X 330 gallons per load X 300 days per year (accounting for holidays, Sundays, and cold winter weather) yields **14,850,000** gallons per year.
- ii. Dust abatement/aggregate cooling.
 - a. 4,000 gallon truck X 2 trips daily yields 8,000 gallons per peak day (gpd).
 - b. 8,000 gpd X 115 days yields **920,000** gallons per year.

B. Irrigation and Domestic:

- i. It is anticipated that approximately 1 acre of the grounds will be irrigated.
- ii. Consists of decorative commercial lawn and landscaping with a caretaker residence.
- iii. 3.5 acre-feet per year X 325,850 gallons/ac-ft = **1,140,500** gallons per year.
- iv. Domestic provides for future use of lavatories and drinking water of up to 60 people.
- v. 12 gpd/person X 60 persons X 260 days = **187,200** gallons per year.

Total estimated consumptive water use = ~17,100,000 gallons = ~52.5 acre feet.

Nearby existing water wells:

Records of all wells within the 6 square mile area surrounding the proposed place of use were obtained from the IDWR Well Driller's Report file. These wells were plotted with respect to location and depth on the attached topographic map. Well density in the area is low with less than ten wells within a quarter mile of the new proposed points of diversion. The four ¼ ¼ sections making up the center of Section 20, have no wells at all. Although the requested instantaneous diversion rate is relatively high, the average daily withdrawal rate, 70 gpm average for 24 hours or 140 gpm average for 12 hours of operation is relatively small so that interference effects to other wells and water right owners are expected to be minimal-to-non existent. The underlying aquifers appear to be both productive and full with high (close to ground level) non-pumping water-levels.

Nearby existing water rights:

Water rights associated with the wells described above were evaluated for the surrounding area. Most of the nearby water rights on file with the IDWR are domestic and/or stockwater rights with small diversion quantities. As described above, the wells associated with these rights are typically 100-to-150-feet deep with non-pumping water-levels within 20 feet of land surface. In other words, the potential for interference effects to these small diameter wells is considered very low. Within Sections 20 and 29 only three non-domestic uses exist. Of these only two are larger than 6-inch diameter. The irrigation well owned by Nau is for a supplemental use only in the case surface water is not available. The industrial well under the name of Feed Service is mis-located on the Driller's Report and, according to the water right, is actually located more than three miles away to the East.

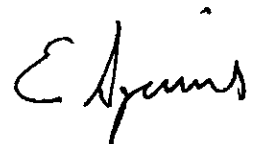
Water-bearing zone to be appropriated.

The geologic section beneath this area is relatively unexplored because most water wells have been completed above 150 feet. The few deepest wells in the general area have been drilled as deep as 311 feet. From the available Driller's Reports, the sub-surface is characterized by complexly and thinly interbedded sands and silty clays. Individual units are rarely thicker than 10-to-20 feet but the thin sand aquifers appear to be quite productive. Because little is known about the deeper section, the total depth of the proposed wells cannot be precisely known at this time. Therefore, this transfer requests that the Applicant be able to complete the proposed new points of diversion (wells) at any depth of the aquifer where sufficient quantities of water are located. In other words, the Applicant wishes the flexibility to complete the new wells anywhere within the water-bearing section from the shallow unconfined gravel aquifer to a conceivable depth of 800 feet below land surface.

It is, both, my intention and hope that you find this application complete and thorough so that processing is straightforward and expeditious. Please call me directly at 342-8369 with any questions or if additional information is needed. We will make every effort to respond right away to any such requests. Time is of the essence in this application and we would greatly appreciate prompt consideration of the matter.

Respectfully,

Ed Squires



c: Town Ranch, LP