

Edl, Michele

From: Steven Burk [sody1@msn.com]
Sent: Monday, July 05, 2010 12:25 AM
To: Edl, Michele
Subject: RE: additional information request/ Spring box, generator piping, and control - 1 Of 2
Attachments: P1000485.JPG; P1000546.JPG; P1000552.JPG; P1010070.JPG

Hello Michele.

I'm sorry I did not return the answer to your questions sooner, as I was away for a day. I live in Idaho Falls and I will be going up to Island Park early in the morning to take care of some cleanup chores. I will be on my cell phone all day please call me if you have further questions not answered by this e-mail.

First let me clarify the source of the water for:

1. The domestic water and the water for generating power. And
2. The water that feeds the pond.

1. The water source for both the domestic water and the generator are from the spring box that is the source of what is named the Hatchery Stream. In both of these cases the water is controlled from the spring box and flows to the basement of the Lodge by way of pipes that originate in the spring box. The water taken from the spring box for the purpose of generating power, simply flows through the basement and then is returned to the Hatchery Stream. I have enclosed a picture of the control system inside the spring box, along with the measurement device and scale readings to manage the system. The excess water produced by the Hatchery Stream that is not diverted through the 4 inch PVC pipe that is used to generate power, flows over a weir, and continues uncontrolled down the Hatchery Stream. I have never observed excess water not flowing over the weir, even when the generator is in use. In other words the Hatchery Stream produces water in excess of that which is diverted for the purpose of generating power, and all of the water is returned back to the Hatchery Stream as it flows through the generator. So, 100% of the water used for generation remains in the Hatchery Stream downstream from the generator.

2. The water that feeds pond, comes from three small unnamed streams, that all originate from a separate spring system further to the west from the Hatchery Stream and up hill from the pond, and is entirely different from the Hatchery Stream, which originates inside the spring box. The water that feeds the pond, from the three unnamed streams, are uncontrolled and simply flow into the pond, and then continue through a control weir box which is used to establish the pond elevation, before it flows out of the pond and continues downstream in one continuous flow as it goes under the highway and onto the lake uncontrolled. I have included a picture of the pond and its control weir.

There is no basement vault for the collection of impounded cistern water, but rather the spring box collects the water as a cistern directly from the spring source, and allows the water to fill the box before it flows over the weir, and runs uncontrolled to the lake.

There is no basement vault for the collection of impounded cistern water, but rather the spring box collects the water as a cistern directly from the spring source, and allows the water to fill the box before it flows over the weir, and runs uncontrolled to the lake. The spring box remains full to the top of the weir continuously at all times, and as I have stated above even runs excess water over the weir when the generator is in use.

I have a survey drawing of both the Hatchery Stream, and the three unnamed streams that feed the pond, which would make more sense to you, and you may wish to have for your file. I tried to send them in this e-mail, but I have recently had trouble with my computer, and in the process of having it cleaned from viruses, I lost the programs that will allow me to retrieve it, and send it on through the Internet. However, if you desire I can send a hard copy by mail to you.

The picture files I am forwarding to you are over 10 MB large, so I will send them in two e-mails to you.

Please feel free to call me on my cell phone if I can be of further assistance.

Steve Burk, cell phone number 208-521-9560

Subject: additional information request
Date: Wed, 30 Jun 2010 18:45:57 -0600

From: Michele.Edl@idwr.idaho.

To: sody1@msn.com

Mr. Burk,

The narrative in the field examination report for your Permit 21-7566 is very brief and doesn't contain all the information I like to see. That makes licensing more difficult but I believe that I will be able to bring this permit up to license status. I do need clarification on a few points.

I understand that your domestic water use (Decreed Right 21-12384) and the IDF&G fish propagation use (Decreed Right 21-2100) come from the same source and have the same point of diversion as this hydropower use.

- 1) Are there two separate pipes conveying water (one for your domestic and one for your hydropower) from the shared spring box to the collection vault in the basement of the Sherwood Museum?

This permit lists 'unnamed stream' as the source. Your proof of beneficial use statement lists Hatchery Stream as the source.

The IDF&G Decreed right (21-2100), lists: unnamed stream, and Sherwood Springs Creek (aka Hatchery Creek) as the sources.

Without an official USGS-given name, the Department's policy is to list the source as 'unnamed stream'.

- 2) I need confirmation that your rights and the IDF&G right are from the same source even though that source appears to have several local names.
- 3) Does the micro-turbine discharge back into the same stream channel that the water was diverted from originally or are the source and discharge streams two different streams?

One condition on your hydropower permit requires that a measurement device be installed. Engineering rods or scales are visible in the file photos for both the shared spring collection box and the basement collection box

- 4) Are there other measurement devices installed?
- 5) How are the scale readings used to manage your system?
- 6) Are measurements recorded?

I do not have dimensions for either collection box. I would welcome them if you can provide them.

Your power generation system doesn't appear to have a DC battery bank for storage of excess power. However, file photos show that you have some water storage available by way of the museum's basement collection vault. I am assuming that the stored water can be used for either domestic or power.

- 7) How much storage does the basement vault provide?
- 8) Does it take more than 24 hours to fill?

I am scheduled to work a full week, this preholiday week and would be willing to phone you for a question and answer session if that would suit your schedule better. I have 208-542-6382 as a possible phone number to reach you.

If I don't hear back from you before Friday afternoon, have a happy and safe holiday. I will resume the review and processing work of this permit on July 6th.

Sincerely,
Michele Edl
208-287-4946

The New Busy is not the old busy. Search, chat and e-mail from your inbox. [Get started.](#)

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