

MEMORANDUM

TO: File 96-8979

FROM: Daniel Nelson – Staff Hydrologist

DATE: November 7, 2017

SUBJECT: Licensing Review of Water Right 96-8979

The field examination and field report performed in 2003, and wasn't processed at the time it was received at the State office in 2004. There are some issues with the field exam that will be addressed in this memo.

History:

The place of use for this permit was a lumber plant that produced wood products for paneling and veneers. Water right license 96-7461 was licensed issued for this facility on January 31, 1983. The license authorizes 0.04 cfs and 1.2 af for domestic use and 0.40 cfs and 133.7 af for industrial use for a total of 0.44 cfs and 134.9 af.

Permit 96-9-8979 was approved on March 27, 199/8, for industrial use of 0.40 cfs from the Pack River at a single point of diversion located in the NESW of Section 32 in Township 59 North, Range 1 West. The place of use is described as being in the entire NE ¼ of Section 32 in Township 59 North, Range 1 West.

Another permit, 96-9120, was issued in March of 2003, with a similar description as water right license 96-7461. A notice of intent to void permit 96-9120 was sent on November 9, 2017, since it appears as though all of the water use from the 3 productions wells is covered by water right 96-7461.

Permits 96-8979 and 96-9120 were field examined at the same time on May 23, 2003. Both field exams for the two permits give a reasonably good picture of how the system operated in 2004. From aerial photography and information from the Secretary of State Business search, it appears as though this plant hasn't been in operation since 2013. Ceda-Pine Veneer Company dissolved in 2013 according to the Secretary of State Business search. The Secretary of State Business search shows that the current owners of the property have the same last name as the owners of Ceda-Pine Company.

Points of Diversion:

The field exam used a topo map to place the point of diversion on the map. The point on the map is very close to an area where a gas line was installed through the trees. A diagram of the pump and the pictures in the field exam suggest that the pump was on wheels, so the open space created for the gas line would be the perfect place to transport the pump to the river. This open space would also allow the permit holder a path to run the water pipe from the river to the plant. Therefore, I believe the point placed on the topo map was reasonably accurate.

Place of Use:

Permit 96-8979 states that the place of use is located in the NE ¼ of Section 32 in Township 59 North, Range 1 West. The field examiner described the place of use as being in the NENE, SWNE, SENE, and NENW of Section 32 in Township 59 North, Range 1 West. There is very little land in the NENW, on the north side of the Pack River, and the south side of the river appears to be a subdivision. The field examiner didn't have access to the aerial photography that is currently available to the Department. It is clear from current aerial photography that the permit was correct, and that the place of use should be described as being in the NENE, NWNE, and the SWNE of Section 32 in Township 59 North, Range 1 West. There wasn't any development in the SENE or the NENW of Section 32.

Diversion Rates:

The field examiner for permit 96-8979 measured the diversion at a flow rate of 180 gpm. The field examiner doesn't specify the type of flow meter used, or if it was a permanently installed meter or not. According to information in the file, the pump being used was designed to pump up to 300 gpm, so it is reasonable to assume with the distance the water was transported, that a diversion rate of 180 gpm is reasonable. The pump open discharges into a small regulation pond, so there shouldn't be much pressure against the pump.

Volume:

Water right license 96-7461 provided a volume of 1.2 af for the domestic use and 133.7 af for the industrial use for a total of 134.9 af for the system. The field report for license 96-7461 determined the volume by splitting out the log sprinkling and plant use. The log sprinkling was determined by multiplying a diversion rate of 81 gpm (0.18 cfs) X 60 Minutes X 24 hours X 245 days of use for a total of 87.47 acre feet. The plant use was calculated by multiplying 99 gpm (0.22 cfs) X 60 minutes X 10 hours per day X 245 days per year = 44.55 af. The domestic use was limited to 1.2 af. The total volume for the permit was 134.9 af (87.47 af + 44.55 af + 1.2 af = 134.9 af).

The field examiner for permit 96-8979 provided information in the narrative from the permit holder stating that Pack River water was pumped at 175 gpm 24 hours a day for 184 days. This would equate to a volume of 142.3 af. The field examination for this permit was performed in 2003.

Permit 96-8979 was filed to provide a supplemental water source for the ground water system. The water production for these wells appeared to be falling off over time, and the surface water appeared to be sufficient source of water. Permit 96-9120 was field examined at the same time, and a recommendation for that field exam was 24.3 af from the ground water wells, and the volume for this permit was also based on a 24 hour per day use. This would suggest an increase of the industrial water use at the time permits 96-8979 and 96-9120 for this industrial system to 166.6 af (143.6 af surface water + 24.3 af ground water = 166.6 af). Therefore, it appears as though there was a total increase in water needs from the time license 95-7461 was field examined in 1981. However, the number of days worked went from 245 days worked in 1981 to 184 days worked in 2003.

It appears from the information available that they went from 5 days a week at 10 hours per day to 7 days a week at 24 hours a day. By going to a longer shift, they could double the number of hours worked for a shorter period during the year. This is a seasonal type plant, so this change does seem reasonable. I have sent a notice of intent to void permit 96-9120, since permit 96-7461 authorizes more water than the wells provided to the system in 2003. However, this permit does provide an additional increment of beneficial use and provides water from another water source. Therefore I am going to recommend that permit 96-8979 be licensed for a diversion volume of 143.6 af. When Permit 96-8979 and water right 96-7461 are combined, they should be limited to a combined annual volume of 167 af, since the maximum amount of use for this system appears to be 167 af.

Conclusion:

I was initially concerned about the changes from 10 hour work days to 24 hour work days, until I noticed that the season was shortened from 245 days to 184 days. This type of industry would be dependent on the logging season and the ability to easily process the lumber. The logging season would be dependent on when they could get trucks onto mountain roads. I would assume that the logging companies would shut down logging when the weather started getting bad. According to US Climate data website, Sand Point, Idaho starts having freezing temperatures in October until approximately April May on average. Frozen wood is harder to process than non-frozen wood, so it is reasonable that they wouldn't want to process logs during these months. There is also the concern of the water freezing in the pump system from the Pack River. Increasing the work days and shortening the work season makes sense economically. Therefore, I feel the volume numbers calculated in the 2003 field exams are reasonably accurate.