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DEPARTMENT OF
WATER RESOURCES

December 22, 2015

Ashley Newbry, P.E.
Idaho Department of Water Resources
State Office
322 E. Front Street
PO Box 83720
Boise, ID 83720-0098

Subject: Monitoring requirements for Permit 37-22545

Dear Ms. Newbry,

Your October 29, 2015 memorandum (attached to Pam Skaggs' 11/2/2015 letter to the Blaine County School District) outlined recommended monitoring activities for Permit 37-22545 for the years 2016 through 2020. In our recent telephone conversation you indicated that IDWR may be amenable to alternative monitoring suggestions. This letter proposes monitoring alternatives.

I recognize that the School District did not have an approved plan prior to beginning production and injection under this permit, and that certain measurements outlined in a December 27, 2013 monitoring plan were not collected as planned. Nonetheless, I believe that some of the monitoring activities (and duration) outlined in your October 29, 2015 memorandum may be more than is needed to evaluate potential injury to existing water rights or property as a result of injecting water pumped under Permit 37-22545.

As an alternative, the Blaine County School District suggests the following monitoring activities under Permit 37-22545:

1. Monitor and record aggregate production volumes (i.e., totalizer readings) and flow rates during the days in which the school is open for operation (may include summer, but excludes measurements on weekends and school holidays) through July 2020.
2. Note the number of production wells in operation at the time of each production reading noted in Item 1.
3. Measure and record injection-well water levels.
 - a. Measure injection-well groundwater levels on an approximate monthly basis in December, January, February, July, and August (months of peak production).
 - b. Attempt to have measurements coincide with days of peak system production and injection rates.
 - c. Measure and record groundwater levels in the Wood River High School Well No. 8 on the same days that groundwater levels are measured in the injection wells.

- d. Continue injection-well and Well No.8 measurements as described above through March 2017.
4. Compile and interpret data and information collected as part of the above-listed monitoring activities during the spring of 2017 to address the question of potential injury to existing water users as a result of injection under Permit 37-22545.
 - a. Include annual diversion volumes through heat exchangers.
 - b. Include maximum flow rates through heat exchangers.
 - c. If the system has a bypass (extraction directly to injection), include annual volumes of bypassed water.
 - d. Provide an analysis of the potential to raise groundwater levels in the vicinity of the injection wells (i.e., in the vicinity of the school campus and surrounding area). Discuss whether the system operation could create a perched water table.
 - e. Confirm that the capacity of the heat exchangers is congruent with the pumping rate (i.e., indicate whether or not pumped water is beneficially used).
5. Submit a revised proof of beneficial use after July 31, 2020 but prior to October 1, 2020.
 - a. Include a compilation of water diverted under Permit 37-22545 through July 2020.
 - b. Include a copy of the above-described analysis addressing the question of potential injury to existing water users as a result of injection under Permit 37-22545.

In advance, thank you for your consideration of this alternative monitoring plan. Please call me if you have any questions or would like to discuss these proposed monitoring activities.

Sincerely,



Christian R. Petrich, Ph.D., P.E., P.G.
Principal Engineer/Hydrologist

cc: Mike Chatterton, Blaine County School District
Howie Royal, Blaine County School District
Pam Skaggs, IDWR

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