

November 3, 2008

MEMORANDUM

OK Gary 11/5/2008

To: Gary Spackman, Administrator, Water Management Division

Through: Chuck Galloway, Chief, Resource Protection Bureau

From: Thomas Neace, Manager, Ground Water Protection 

RE: Fees for Closed Loop Geothermal Systems

Closed loop geothermal systems are becoming more popular for residential/commercial heating and cool systems. These closed loop systems are often installed in drilled borings (>18 feet below ground surface) where polyethylene tubing is installed into the boring, and the boring is completely filled with thermally enhanced bentonite grout.

Fees for these closed loop geothermal systems are not specified in the existing rules or Idaho Code. Idaho Code specifies:

*“There shall be a seventy-five dollar (\$75.00) charge for the permit if the well is to be used for domestic or monitoring purposes. If the well is to be used for other than domestic or monitoring purposes, the charge for the permit shall be two hundred dollars (\$200). All moneys received pursuant to this section shall be credited to the water administration account. The director may provide a blanket drilling permit for site specific monitoring programs which will determine the quality, quantity, temperature, pressure of other attributes of aquifers. The application for a blanket permit shall include a design proposal prepared by a licensed engineer or licensed geologist which shall describe the overall drilling program and all relevant technical features of the wells to the satisfaction of the director. Progress reports, completion or other data may be required as provided by rule. The fee for the blanket permit shall be one hundred dollars (\$100) plus an additional fifty dollars (\$50.00) per well.”*

The Ground Water Protection Staff including the Regional Offices have discussed the matter and have evaluated four potential options regarding fees for the closed loop geothermal systems.

- 1) A strict interpretation of the fee language from IC 42-235 indicates that the fee for any well other than a domestic or monitoring well shall be \$200. Some of these systems require ten or more borings to facilitate efficient heat transfer. Charging \$200 per boring makes the cost of installing a closed loop geothermal system less attractive and creates the appearance that IDWR does not promote the use of environmentally friendly alternatives.

- 2) A blanket permit for site specific monitoring is allowed for monitoring wells which charges a \$100 fee and \$50 for each well. The blanket permit concept is a practical one to reduce costs and encourage closed loop geothermal systems, however the blanket permit is specific to monitoring wells in the IC. Use of the blanket permit without a change to the code could be considered invalid.
- 3) The Department could charge the permit fee of \$200 for a permit and allow the driller to drill up to 10 borings for the closed loop system. This policy would provide some funding to the Department for processing the permit but keep the expenses to a minimum which could facilitate/encourage these energy efficient systems.
- 4) The Department could provide a permit but not charge a fee similar to the well decommissioning process (well abandonment). This policy would encourage/facilitate these types of systems by not requiring any fees. However, the Department would have to provide these services while receiving no compensation for the work, shifting the expense to the tax payer instead of the owner paying a fee for the state services.

### **Recommendation**

The Ground Water Protection Section recommends Option 3, permit fee of \$200 for a permit and allow the driller to drill up to 10 borings for the closed loop system. This is a practical alternative which provides fee income to the Department while providing a reasonable cost to facilitate environmentally friendly heating and cooling systems.

We further recommend that within a next two years we propose a change in the Idaho Code to amend the fees associated with well permits. At that time we can propose a permit fee specifically for closed loop geothermal system borings.

Please call me if you have any questions.