

**Agency of Natural Resources
Department of Environmental Conservation**

**Water Supply Division
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MEMORANDUM

To: Groundwater Coordinating Committee

From: Rodney Pingree, Acting Chair

Date: January 25, 2010

Subject: Minutes from the January 21st Meeting

Next Meeting: *Thursday February 18th, at 1:00 pm to 3:30 pm in the Water Supply Division Conference Room, Old Pantry Building*

Attendees

Dennis Nealon, ANR DEC Water Supply; Rodney Pingree, ANR DEC Water Supply; Scott Stewart, ANR DEC Water Supply; Michael Smith, ANR DEC Waste Management; Jeff Fehrs ANR DEC Wastewater Management Division; Jeff Comstock, Agency of Agriculture, Food, and Markets; Eric Hanson, Vermont Rural Water Association; Liz Royer, Vermont Rural Water Association; Larry Becker, ANR Geology Division; Don Robisky, Wastewater Management Division; Anne Whitely, Commissioners Office.

Geothermal Well Language

Anne provided language regarding the regulation of geothermal wells. This language was provided for the committee's consideration and potentially to amend Appendix A of the Vermont Water Supply Rule. It addresses both public and privates wells and speaks to standing column open loop geothermal wells.

The proposed language allows standing column wells given the following:

- (i) No additive is added to the re-circulated water;
- (ii) The heat exchange medium in the system is R-410 or a different medium approved by the Secretary;
- (iii) The system has a low pressure safety cutout circuit that will turn off the system when there is a pressure leak in the heat exchange medium containment vessel; and
- (iv) All electronic components of the system are properly grounded to prevent potential electrolysis of metals.

The committee agreed on the above and also added additional language which reads “in the event the heating exchange system source is disconnected as a heating or cooling source it shall be capped labeled or removed.” The committee also spent some time discussing whether or not language regarding abandoned geothermal systems was needed. In the end the group decided not to include additional language.

Geothermal Grant

Larry stated that the Department of Energy (DOE) had stimulus money available to states. Vermont is slated to receive \$160,000 of this money which will be allocated over a 3 year period. The bulk of the grant will be used for document management. Larry envisions having a geo exchange system, a template for such a system may be available from DOE. For example, a person might click a on electronic map and all the documents, maps, and data for the specified location would be displayed.

The DOE is also interested in geothermal wells. They would like to use this technology to operate a 160 mega-watt power plant. A small portion of the grant is therefore geared to investigating wells for geothermal use. Larry thought that finding several existing deep wells located adjacent power corridors would be ideal. The wells would have to be near to one another so that they could be connected by hydrofracturing. Given the depth of the wells and the potential lack of water with depth, the connected wells would possibly be charged with water.