Agency of Natural Resources
Department of Environmental Conservation

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MEMORANDUM

To: Groundwater Coordinating Committee

From: Rodney Pingree, Chair

Date: May 20, 2011

Subject: Minutes from the May 19th Meeting

Next Meeting: *June 16, 2011*

Attendees
Dennis Nealon, ANR DEC Water Supply; Rodney Pingree, ANR DEC Water Supply; Eric Hanson, Legget, Brashears & Graham, Inc.; Shaun Fielder, Vermont Rural Water Association; Kim Greenwood, Vermont Natural Resource Council, Craig Heindel, Heindel and Noyes, Inc. Liz Royer, Vermont Rural Water Association; Mark Chapman, Agency of Natural Resources Legal Division; Scott Stewart, ANR DEC Water Supply; Gail Center, Vermont Department of Health; Jon Kim, Division of Geology and Mineral Resources; Peter Ryan, Middlebury College; Carey Hengstenberg, ANR DEC Waste Management; Matt Levin, Vermonters for a Clean Environment; Don Robisky, ANR DEC Facilities Engineering.

Arsenic

Jon and Peter presented a study entitled "Deciphering Elevated Arsenic in Groundwater Wells in Vermont." Jon mentioned that his Division has been reviewing arsenic date from the Department of Health for the last twelve years. In 2003, arsenic data related to public water systems from the Water Supply Division was obtained and in 2009, Helen Mango of Castleton State provided additional data.

The data showed elevated arsenic correlated with the Taconic Allochthons of southwestern Vermont. Approximately 25% of the drilled wells in the area have elevated arsenic and this is especially true for wells drilled around Lake St. Catherine.

Students from Middlebury College participated in the study. They collected and geochemically analyzed 41 rock samples from the area. They indentified higher arsenic levels in the pyrite of

black shale. Their geochemical analysis showed that arsenic was elevated with the occurrence of iron, sulfate, and sodium. Weathering of the rock also contributes to the high arsenic and areas subject to less metamorphism is yet another contributor. The analysis concluded that elevated arsenic in well water is strongly associated with certain bedrock conditions.

Peter stated that the Taconic slates contain 10 times the amount of arsenic than the average rock.

Groundwater in the Public Trust

Matt Chapman discussed the new groundwater public trust doctrine along with the draft interim groundwater public trust policy. He stated that groundwater issues related to quantity will be in compliance with the public trust as determined by Groundwater Withdrawal Reporting and Permitting Rule.

Public trust also relates to groundwater quality and Matt suggested a three step process that the Agency could follow:
1) develop a process policy for permitting decisions,
2) assess and revise the Groundwater Protection Rule and Strategy to ensure it meets the requirements of the public trust doctrine, and
3) revise individual rules related to groundwater in regard to the public trust.

The interim guidance is almost complete. Work on the Groundwater Protection Rule and Strategy will start soon and Rodney mentioned that the Groundwater Coordinating Committee will have a role in revising the rule.

Groundwater Class II Reclassification

Changes to the Brandon Class II petition were made. Rodney requested that comments regarding the petition be sent to him. Otherwise the petition will go on to the Secretary.

Background Contaminants

Carey mentioned that the Groundwater Protection Rule and Strategy does not address natural occurring background contaminants. This has been a problem at monitoring wells upgradient from landfills. Iron and manganese are chemicals that often naturally spike at such wells. Carey thought that the rule should address ambient contaminants and will draft a policy regarding this issue.