

**Eastern Virginia Ground Water Management Area Regulation Amendments and
Ground Water Withdrawal Regulation Amendments
Regulatory Advisory Panel Meeting
Smurfit-Stone- West Point
October 28, 2009- 9:30 a.m.**

RAP members present

David Bailey, The Environmental Law Group
Ron Harris, Newport News Waterworks, representing the Va. Section of the American Waterworks Association
Gayl Fowler representing SAIF Water Wells, Inc.
Christian Volk, Ph.D., Water Quality Manager, representing VA/MD-American Water
Thomas J. Roberts, Smurfit-Stone Container, representing Mission H₂O
Britt McMillan, Malcolm Pirnie, representing Eastern Shore of Virginia Ground Water Committee
Larry Foster representing Hampton Roads Planning District Commission
Susan Douglas, Va. Dept of Health
Curtis Consolvo, GeoResources
Frank W Fletcher, PhD, PG, Retired professor
Bill Pennell, Lancaster County Administrator
Mark Bennett (alternate for George Harlow), U.S. Geological Survey
Jesse Royall, Sydnor Hydro
John D. O'Dell, Water Well Solutions, LC
Mike Neuhard, Deputy County Administrator, Stafford County
Lynn Gayle, Taylor and Fulton, Inc. and member of the Va. Potato and Vegetable Grower's Association
Lewis Lawrence- Middle Peninsula Planning District Commission
Butch Nottingham-VDACS

RAP Members not present

Sheryl Raulston, International Paper- Franklin Mill, representing VMA
George Harlow, U.S. Geological Survey

Public Attendees

Jeff Fletcher
Harry Critzer
Whitney Katchmark
Gina Shaw
Vernon Land
Al Moor
Martin Schlesinger
Barry Fitz-Jones
Steve Werner
Gordon Dudley

DEQ Staff

Scott Kudlas
Robin Patton
Hank Ghittino
Melissa Porterfield
Erinn Tisdale

Introductions

Scott Kudlas welcomed RAP members and introductions were conducted. A draft agenda was distributed to the RAP and members of the public.

Tom Roberts with Smurfit Stone welcomed the group to West Point.

Scott Kudlas addressed the issue of the announcement of the closure of the International Paper Facility in Franklin, Virginia. The GW RAP will not spend any time at the meeting discussing the announcement or any impacts concerning the ground water withdrawal permit issued to International Paper. The agency has worked with USGS to arrange for the installation of monitoring equipment to monitor the changes to ground water levels that will occur as ground water pumping is reduced in correlation to the shutdown of the facility.

Administrative Issues

Melissa Porterfield discussed administrative issues with the group including attendance records for the meeting, and the availability of members of the public to sign up for the interested parties. Members of the GW RAP were reminded that October 29, 2009 is the deadline for responding to Melissa Porterfield with preferred meeting dates for December. The December meeting will likely be held in the James City County area.

Today's meeting agenda includes a public forum. The public forum portion of the meeting provides an opportunity for the public to provide comments to the GW RAP. Individuals that are interested in speaking during the public forum were asked to contact Melissa Porterfield prior to noon. In the event that there are no individuals that sign up for the public forum, the public forum will not be held.

Melissa Porterfield provided a brief overview of the regulatory process for the GW RAP. The overview included a draft timetable for developing a proposal for consideration by the State Water Control Board. According to the schedule presented, a proposal would be developed by February 2010 to be presented to the State Water Control Board. Melissa Porterfield should be contacted if anyone has questions concerning the regulatory process.

Ground Water 101 Presentation- continued from first meeting

At the first GW RAP meeting in September 2009, Robin Patton, DEQ, presented information to the GW RAP concerning ground water concepts. Due to time constraints, she was unable to finish her presentation. The remaining portion of her presentation was presented to the GW RAP at this meeting. The presentation focused on providing data on the impacts withdrawals have on ground water levels, as well as data on water levels.

GW RAP members were provided with an opportunity to ask questions concerning the information presented to gain a better understanding of ground water conditions.

Discussion of Expansion of the existing Eastern Virginia Ground Water Management Area

Scott Kudlas presented information to the GW RAP concerning DEQ's position concerning the designation of the Ground Water Management Area. The agency believes that the coastal plain aquifer system is best managed as one management area since impacts are experienced throughout the entire coastal plain. The agency also believes that it is best to designate the area now rather than wait until later as part of managing the resource comprehensively.

There are four criteria that the State Water Control Board can use to designate an area as part of a ground water management area-

- Ground water levels in the area are declining or are expected to decline excessively.
- The wells of two or more ground water users within the area are interfering or may reasonably be expected to interfere substantially with one another.
- The available ground water supply has been or may be overdrawn
- The ground water in the area has been or may become polluted.

The agency presented information concerning each of the above criteria to the GW RAP as detailed below-

Ground water levels in the area are declining or are expected to decline excessively.
Monitoring data illustrates that water levels in aquifers is declining. USGS data was presented to illustrate these declines occurring in the Northern Neck and Middle Peninsula areas in multiple aquifers.

The wells of two or more ground water users within the area are interfering or may reasonably be expected to interfere substantially with one another.
Maps were presented that illustrate the overlap of multiple intersecting cones of depression. On a sub-regional scale well interference is occurring between cones of depression. Also, a recent study issued by the Maryland USGS, examined ground water withdrawals in southern Maryland and the impacts of the cones of depression. There is likely extension of the cones of depression from the withdrawals occurring in Maryland into Virginia.

The available ground water supply has been or may be overdrawn
Modeling data indicates that critical cell violations are occurring within the undesignated areas. (80% drawdown criteria violated)

The ground water in the area has been or may become polluted.
Salt water intrusion is currently occurring in parts of Lancaster, Middlesex, Gloucester counties and throughout Matthews County.

Discussion concerning the impacts expanding the ground water management area would have on the ability of development to occur in their locality took place. Potential options concerning the availability of water resources to support development were mentioned by members. Certainty of obtaining a ground water permit is an issue that should be considered. Development of a mechanism for counties to provide responses to developers concerning available water was also suggested. Mention was made of municipalities having a pre-approved amount of water in reserve to offer potential developers.

Hesitation was expressed by members of the group towards moving forward with the expansion of the ground water management area ahead of the revision of the ground water withdrawal regulations. The GW RAP was reminded by agency staff that the two regulatory actions will be presented to the State Water Control Board together since they are so closely related.

After reviewing the information presented by DEQ, the GW RAP reached consensus that one or more technical criteria are being met for expanding the ground water management area, with the condition that at the request of the GW RAP group, this issue can be revisited once the regulation is developed before it goes forward as a proposed regulation.

A lunch break was taken from 12:15-1:20.

Public Forum

No speakers registered to speak and no public forum was held at the meeting.

Presentation on Issuance of Historic Based Ground Water Withdrawal Permits for Industrial, Commercial, Public, and Private Water Supply Systems and for Agricultural Users

An overview was provided concerning the process for processing historical ground water withdrawal permits. The agency shared lessons learned while dealing with historical permits, which included issues associated with well construction information, claims of prior use, area of impact, water conservation and management plans, and excess and supplemental requests. Staffing issues related to the review of historical permits was also mentioned.

The GW RAP was presented with the following list of questions concerning Historical Permits-

- Should well constructions and pump intake settings continue to be required prior to issuance of a historic based permit?
- Should a claim of prior use be reduced if the claimed amount is less than needed for operations at the time of permit issuance?
- What should be done if newly regulated withdrawals cause additional cells to become critical when their historic based permits are included in the Total Permitted simulation?

- Should permittees with historic based permits have mitigation responsibilities?
- If historic based permits are to have mitigation responsibilities, how should the mitigation area be determined?
- Should historic based permits contain Water Conservation and Management Plans?

The GW RAP discussed these questions and issues related to these questions, however, consensus was not reached concerning the answers to these questions. Discussing these questions with the GW RAP provided insight into issues that will need to be addressed during the development of future revisions to the regulations and how existing users will be included in the permitting process. (incorporating current water withdrawals occurring in the expanded area into a permit program)

Matrix of Water Permits

A matrix of the agency's water permits was distributed to the GW RAP for review. This matrix provides a comparison of all permits issued by the agency, the applicability of the permits, permit fees, as well as the term of the permit.

Wrap Up/ Adjournment

GW RAP members are asked to review the article titled "The Journey from Safe Yield to Sustainability" by William M. Alley and Stanley A. Leake that was previously distributed prior to the next meeting. The next meeting of the GW RAP will be held at the DEQ Piedmont Regional Office on November 19, 2009 starting at 9:30 am.

The meeting adjourned at 3:20 p.m.