Eastern Virginia Ground Water Management Area Regulation Amendments and Ground Water Withdrawal Regulation Amendments Regulatory Advisory Panel Meeting

2007 Legacy Hall, 4301 New Town Ave. Williamsburg, VA 23188 April 1, 2010 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 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, Inc.

Frank W. Fletcher, PhD, PG, Retired professor

Bill Pennell, Lancaster County Administrator

George Harlow, U.S. Geological Survey

Jesse Royall, Sydnor Hydro

P.J. Smith (alternate for Sheryl Raulston) representing VMA

Lynn Gayle, Taylor and Fulton, Inc. and member of the Va. Potato and Vegetable

Grower's Association

John D. O'Dell, Water Well Solutions, LC

Lewis Lawrence- Middle Peninsula Planning District Commission

Harry Critzer- Stafford County

RAP Members not present

Sheryl Raulston, International Paper- Franklin Mill, representing VMA Mike Neuhard, Deputy County Administrator, Stafford County Butch Nottingham-VDACS

Public Attendees

Jeff Fletcher

Whitney Katchmark

Gina Shaw

Vernon Land

Mike Lang

Gary St. John

Barry Fitz-James

Davis Phaup

Linda Miller

Steve Werner

DEQ Staff

Scott Kudlas Robin Patton Hank Ghittino Melissa Porterfield Robyne Bridgman Ellen Gilinsky Scott Bruce

Introductions and Administrative Issues

Melissa Porterfield welcomed everyone to the meeting and introductions were made. All individuals present were asked to sign in on the attendance sheet. Anyone interested in the activities of the GW RAP may sign up to be added to an e-mail distribution list to receive information about the GW RAP meetings. Individuals interested in participating in the public forum should contact Melissa Porterfield prior to noon. If no individuals sign up for the public form, the public forum will not be held.

Today's meeting is the last scheduled meeting of the GW RAP.

Today the GW RAP will be reviewing draft language distributed to the group. The language distributed is for discussion purposes only and is not proposed regulatory language. The language has not been review by agency attorneys and further modifications will be made to the regulatory text before it is proposed.

The agenda identifies specific sections of the groundwater withdrawal regulations that the group will be discussing. The group was provided with an entire copy of the draft language with proposed regulatory changes so that the group could see how the different sections of the regulations will interact with each other. The group however will not be discussing the entire regulation today. The sections that discussions will focus on today include the following sections:

Section 100- Water Conservation and Management Plan

Section 102- Evaluation of project need

Section 104- Surface water and groundwater conjunctive use systems

Section 106- Drought relief wells

Section 340- Permit denial

Well Labels

Scott Bruce briefly updated the group on well labels that are being developed for groundwater withdrawal wells. This was in response to comments from a RAP member requesting changes to the regulations concerning well labeling requirements. A prototype label was shown to the group and members were able to ask questions concerning the labeling requirements. As a result of the discussion a suggestion was made to have as an option labels that could be mounted on flat surfaces instead of attached with a radiator clamp. The prototype labels are enclosed between two clear plastic plates with a gasket between the plastic to protect the label from moisture. These labels are constructed in a

manner that is similar to the way paper signs and maps are posted in outdoor locations to protect them from being damaged by moisture.

Section 100- Water Conservation and Management Plan

The group discussed the addition of a requirement for water conservation and management plans to address the use of water by users to which they provide greater than 300,000 gallons of water per day. The thought behind adding this requirement would be to require all users of water that are withdrawing greater than 300,000 gallons of water per day to have a water conservation management plan.

The group discussed the complexity of identifying all users being provided with greater than 300,000 gallons of water per day and requiring individual users to have a water conservation and management plan. Some members believed that this approach would be overly burdensome on the permittee and the applicant. Instead of having a set threshold of water listed in the regulations, the group suggested that the regulations instead should state that major users of water should be targeted in the water conservation and management plan submitted by the permittee. Some permittees stated that they believe their fee structure naturally drives larger users to conserve water to minimize the costs associated with purchasing water.

The group also discussed the fact that the water conservation and management plan should be a living document that should be allowed to be modified after the permit is approved to address continuous improvement. Industrial users were identified as one type of user that would need flexibility to revise the water conservation and management plan to address updates to the operation of the facility that would occur during the permit term. Flexibility is also needed within water conservation and management plans for agricultural users to allow for changes to crop rotations and changes in irrigation methods. A suggestion was made to allow multiple crop rotations to be included in the water conservation and management plan for agricultural users.

The group also suggested that the agency consider adding a definition of "feasible" to the regulation since the term us is used throughout the water conservation and management plan section. The definition discussed inclusion of the thoughts that "feasible" means that something is capable of being done considering logistics and cost.

Some members expressed that water recycling and water reuse needs to be emphasized in water conservation and management plans.

The regulations require water conservation and management plans to contain an educational program. A discussion concerning options that permittees have to educate users also occurred with members providing information on the educational strategies they use for their permits. Educational programs are developed and implemented by the permittee.

Section 102- Evaluation of project need

The group discussed the evaluation of project need section. A suggestion was made to make the first part of the section more descriptive of the issues the section will address and to use the term "withdrawal" instead of "project".

The group also discussed the inclusion of a default value of 185 gallons per residential connection in the regulations. The group was divided concerning whether to include the default gallons per residential connection into the regulations or to place the requirement into agency guidance. The agency indicated that this value would be placed into guidance and not the regulations.

In examining the language concerning the justification of need for commercial and industrial users, the group discussed the reporting of the average daily water use rate per employee per month. Some members thought that this information was not needed and would potentially be misinterpreted by some. Others believed that this information should be reported in order to allow the user to account for water needed for use by employees and not for the commercial or industrial use. For instance, a withdrawal amount should be for the amount of water needed for the commercial or industrial process and for the employees needed as part of the commercial or industrial process.

For industrial users, a member suggested revising the regulation to include the applicant providing information on the amount of withdrawal per unit of output or a similar metric identified by the user.

The group discussed the alternatives analysis and suggested that the language in C 2 be re-worded to address the requirement that the health department requires the highest quality water to be utilized for drinking.

Some members of the group also suggested that the language in D 3 and E 3 be reworded to make it clear that the interconnectivity of water systems and the ability to purchase water from supplies should be considered as an alternative.

Some members of the group suggested striking the language on page 18, lines 26-27, specifically to eliminate the phrase "such as reducing the size, scope, configuration, , or density of the proposed project."

Section 104- Surface water and groundwater conjunctive use systems

This is a new section that may be added to the regulations. The statute currently mentions these types of withdrawals but the current regulations do not currently address this type of water use.

Comments were made that the language in B be reviewed to make sure it is not in conflict with the health department's requirement for the highest quality water to be utilized for drinking. Drinking water will need to meet water quality standards.

The group briefly discussed the difference between drought relief permits and conjunctive use permits. For users of groundwater and surface water for a water supply, a well may be used for both purposes- to supplement surface water and to provide additional water during periods of drought. The statute states that drought relief wells are to be approved for human consumption purposes when mandatory water restrictions have been implemented.

Members asked what happens when the same wells are potentially utilized for both conjunctive use and drought relief. The use of the water and amount of water routinely used for supplementing surface water would be considered when evaluating what type of permit would be applicable under different conditions.

Members of the group expressed that there was confusion concerning the applicable requirements, since all criteria of 110 apply. The agency should consider the criteria that will be examined for all permits, criteria for conjunctive use, and criteria for drought relief permits. Currently the regulations require the same criteria to be applied to all types of permits. Comments were made suggesting that the agency should attempt to streamline the evaluation required prior to approving groundwater conjunctive use permits.

Lunch break 12:15-1:15

Section 106- Drought relief wells

A suggestion was made to amend the title of the section to include the term "supplemental".

The group also discussed adding a definition of "drought relief wells" to the regulation. The terms emergency well and wells required due to contamination events were suggestions concerning how to define drought relief wells.

The group continued to discuss the differences between using wells for supplementing surface water and for providing water during droughts. The group discussed that from an operational standpoint it was better to have a well that is in operation or active periodically versus having a well dormant and not pumping for long periods of time. There was a suggestion made to amend the language in B to address the fact that existing wells may be utilized more during periods of drought.

Members of the group reiterated that the section should be more specific concerning the permit conditions that drought relief permits would be subject to. This was in response to seeing the language contained in C of this section. A suggestion was made that theses types of permits should be subject to less requirements due to the fact these withdrawals will not be continuous.

Members expressed concern that the language in the section requires the withdrawals to be evaluated until stabilized since the stabilization requirement in section 110 D 3 h is referenced in this section. A member of the group stated that they believed that this

evaluation was not appropriate since the withdrawals would not be continuous. The member also questioned the validity of evaluating the withdrawal until stabilized when stabilization is not likely to occur during the ten year permit term.

The agency will be reviewing the sections concerning drought relief permits and conjunctive use permits with staff and re-drafting the sections in response to the comments received from the GW RAP.

Section 340- Permit denial

The group reviewed the conditions for permit denial listed in the draft language. The agency is adding this language to the regulations to more closely mirror the standard permit denial language included in other permit programs. Comments were made that under A 4 the language should clarify that the agency would deny a permit that is being reapplied for if the water conservation and management plan contained in the previous permit had not been implemented.

Comments were made concerning the reason for denying a permit that did not pass the 80% criteria. There are concerns from some members concerning the 80% drawdown language in the draft regulations and the criteria utilized to evaluate conditions of the aquifer the withdrawal is occurring from. This criteria is listed in 110 D 3 h. Conducting the evaluation using the stabilized effects is still a concern of members, even though the regulations currently in effect require the stabilized effect to be evaluated.

Public Forum

No one signed up for the public forum and a public forum was not held.

Expansion of GW Management area

The group revisited the topic of expanding the Eastern Virginia Ground Water Management area to include the entire coastal plain. The group was provided with language in advance of the meeting to review.

Some members expressed concern with expanding the groundwater management area because of the amount of time it would take the agency to process permits due to limited staffing. Those that are currently withdrawing groundwater would be required to apply for historical permit based on their current use of groundwater. Members were seeking assurance that adequate DEQ resources would e available to process the additional permits needed as part of the expansion of the groundwater management area.

Others expressed concern that without the expansion of the groundwater management area, the resource would not be managed and that the supply of groundwater would diminish and not be available for use.

At the conclusion of the discussion, the group stated that the expansion of the groundwater management area was a step that needs to be taken to protect the resource.

Conclusion/ Wrap-up

The agency provided the GW RAP with the next steps it plans to take concerning these regulations. The agency will continue to work to revise the regulations. The agency will present both the proposed expansion of the Eastern Virginia Groundwater Management Area (Chapter 600) and the proposed Groundwater Withdrawal Regulations (Chapter 610) to the State Water Control Board at the same time. The agency is currently targeting these regulations for the June 2010 meeting. Once proposed regulations are adopted by the board, the regulations will undergo an executive review. Once the executive review is completed, a comment period for the proposed regulations will be announced. During the comment period, GW RAP members and members of the general public will be able to submit comments on the regulations. If extensive comments are received, the agency may contact the GW RAP to review the comments received and the changes to be made to the regulations in response to comments. The agency will then present a final regulation to the board for approval.

The meeting adjourned at 3:40 p.m.