

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**ENVIRONMENTAL QUALITY BOARD**

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**MINUTES**

**WEST VIRGINIA ENVIRONMENTAL QUALITY BOARD**

**DECEMBER 10, 2003**

**I. General**

On December 10, 2003, a quorum of the members of the Environmental Quality Board (hereinafter referred to as the ABoard@) met at its offices located at 1615 Washington St. E., Charleston, West Virginia. Dr. Snyder, Chair, called the meeting to order at 1:00 p.m.

Board members present were as follows:

Ed Snyder, Chair  
Bob Jenkins, Vice Chair  
Edward C. Armbrecht, Jr.  
Cameron Hackney  
Scott Simonton

Staff members present were as follows:

Libby Chatfield  
Becky Charles  
Melissa Carte

Whereupon, the Board addressed the issues set forth in the meeting agenda as follows:

## I. Remining Variances

### 1) Catenary Coal Remining Variance:

The Board received an application for a variance from water quality standards for remining activities on behalf of Catenary Coal Company on September 11, 2003. The company is seeking a variance for the Left Fork of White Oak Creek and for Moccasin Hollow of White Oak Creek (near Leewood in the Cabin Creek and Sherman Districts of Kanawha and Boone Counties respectively). Earl Moles, of the Decota Consulting Company provided the Board with additional information regarding the application, including a “proposal map” and “current site conditions map”; water data for two seeps above Moccasin Hollow sediment pond and impoundment; technical corrections requested by the Division of Mining and Reclamation; and the “Best Management Practices” which will be utilized during the operation.

He also informed the Board members that the remining application will be modified to include two outlets to the sediment ditch proposed above Moccasin Hollow. Adding these outlets will cause water to run from the remining site down and through an existing sediment pond and outlet (Outlet 19) which are not part of the remining project. The water leaving the remining site will be subject to less stringent limits established by the remining variance, however once the water enters the existing sediment pond, it will be subject to the more stringent limits established by NPDES Permit WV0093751 which is not a remining permit. Although it is not part of the proposed remining operation, the Company may request, through this remining variance application, a variance from those current manganese limits at Outlet 19.

Mr. Moles noted another potential option that the company could use to address the manganese issues at Outlet 19. Since NPDES Permit WV0093751 which covers Outlet 19, is currently proceeding through the permit renewal process, depending upon the manganese limits established in the renewed permit, the Company may appeal those limits to the Board.

The Company is continuing to work with the Division of Mining and Reclamation and will provide the Board with updated information as it becomes available. The Board will include the continued discussion of the

Catenary Coal Company's remining variance application on the February Board meeting agenda.

2.) Upper Kanawha Valley Development Corp.:

On September 11, 2003, Upper Kanawha Valley Development Corp. submitted an application for a variance from water quality standards for remining activities for "Phase Two" of their remining project. The Board began the preliminary review of the variance application during the December 10, 2003, Board meeting.

The Company provided the Board with an update on the ongoing Article 3 and NPDES permit application for the current proposed operation which has been filed with the WVDEP's Office of Mining and Reclamation. That application is reaching the final stages in the approval process. The Board members may schedule a site visit to the area and will include the continued discussion of the Upper Kanawha Valley Development Corp.'s Phase Two remining variance application on the February Board meeting agenda.

## II. Rulemaking

1.) Nutrient Criteria Committee:

Chairman Snyder informed the Board members that he attended the Nutrient Criteria Committee meeting which was conducted December 9, 2003, in Moorefield. During the NCC meeting, several Committee members provided updates on various other nutrient criteria programs such as ORSANCO and the Chesapeake Bay. In addition, the NCC budget committee is continuing to meet in order to review and allocate the available resources.

Further, due to concerns expressed by Board members regarding NCC member meeting attendance and continuity, the Committee has opted to conduct the NCC meetings on the third Thursday of each month in Buckhannon. The next NCC meeting will be held on January 15, 2004, at the WV Farm Bureau office in Buckhannon.

## 2.) Design Flow Regimes:

The Board continued its discussion of various design flow regimes. Several representatives from the US Geological Survey (USGS) appeared before the Board to discuss issues such as the flow data which is currently available from the agency. A copy of the USGS slide presentation is attached to and made a part of these minutes as Exhibit "A". Ron Evaldi, who is the Director of the USGS River Gage Program in West Virginia, informed the Board that the USGS utilizes a river gage, which is instrumentation maintained beside a stream that is designed to measure and keep record of the rise and fall of the water, to determine the height of the water. Although West Virginia has approximately 125 river gages throughout the state, currently only one-half of those river gages are actually used to monitor the continuous flow of the rivers.

In addition, historically West Virginia has had 130 continuous discharge monitors, however, because of funding cuts the USGS has maintained only 65 gages over the past decade. The bulk of those gages monitor drainage basins which range anywhere between 100 to 1,000 square miles. There are very few gages which monitor small drainage basins and those gages have relatively short periods of record.

All gages currently being operated by the USGS will provide the height of the water information. To convert that information into flow data the USGS must measure the rivers periodically (once every 6 to 8 weeks) and establish statistical data. Once it is analyzed all USGS data, including the historical data and technical resources, is published and is also available on their website (<http://water.usgs.gov>). In addition, most of the river gages report the data directly to the web through automated telemetry in near real-time. The data from West Virginia river flow gages are often used for recreation and tourism, planning for construction projects, research of climatic changes, and also for the management and protection of the environment.

Jeff Wyle who is the USGS surface water analysis specialist then provided the Board with the current low flow study. There have been twenty additional years of data collected since that study was completed in 1983. The independent variables in the study were the size of the drainage area and the variability index (relates to flow durations and how flow varies). Further, the study was used to establish only the 7Q10 and the 7Q2 flow rates.

Mr. Wylie explained how harmonic mean flows are calculated using the USEPA's formula. To calculate harmonic mean - invert each of the mean daily discharge values, add those numbers then divide that number into the total number of values (invert then average). Mr. Wyle stated that the problem which arises when calculating the harmonic mean design flow rates with this mathematical formula is when there is no flow in the stream ("0" as a mean daily discharge value). Mr. Wylie indicated further that the USEPA method does not "regionalize" well. Using available data from the Greenbrier River at Alderson, Mr. Wyle then calculated and compared an example of various design flow rates: if the Harmonic Mean is 391 cfs; then 30Q5 would be 85.6 cfs; 1Q10 would be 47.8 cfs; and 7Q10 would be 52.4 cfs.

The USGS reported that the agency met with the WVDEP on October 3, 2003, to conduct preliminary discussions regarding conducting a new low-flow study. The total cost of the project would be between \$600,000 and \$700,000 but could be conducted in separate phases. In order to fund the study the USGS proposed using a co-op match program, with the WVDEP being responsible for 55 percent of the funding and the USGS providing the remaining 45 percent.

During Phase One of the study, which would cost approximately \$200,000, the USGS would review the historical and existing gage data, compile and analyze statistical data, look for trends within the data, conclude whether any trends are regional in nature and determine the cause and effects of the trends. In addition Phase One will also encompass technical issues such as human impacts (dams, landfills, mining, timbering and urbanization) as well as climatic changes.

Mr. Wyle then discussed several recent studies involving climate change data which were conducted at 400 sites throughout the United States. Changes in the climate could result in an increase or decrease in the amount of water flowing in streams and therefore the flow values would be changed. A study which focuses on climate changes in West Virginia is an important project which should also be conducted. This study should also address whether the climatic data can be regionalized, determine how to treat the trend in a data analysis, the applicability of the data analysis to small drainage basins and the transferability of harmonic mean.

Hugh Bevins the USGS District Chief for West Virginia, stated that USGS is proposing to include in the study the various design flow methodologies which the Board is considering implementing in the water quality standards rule. If this study is done the Board and other interested parties would have accurate data on which to base the selection of a particular design flow. He concluded that the Board should not change the flow methodology in the water quality standards rule until the study is complete. The study may take two or three years to complete.

Cliff Whyte of the WVDEP appeared before the Board to provide the information compiled by the WVDEP during their survey of design flows implemented in other states. Pennsylvania, Ohio, Maryland, Kentucky, Virginia and Connecticut were asked various questions regarding the implementation of the currently effective design flow including the rationale for using or changing a particular design flow, any challenges experienced when implementing the currently effective design flow regime, and also any specific advantages or disadvantages to the design flow. A copy of the results of survey is attached to and made a part of these minutes as Exhibit "B".

At the conclusion of the USGS and WVDEP presentations, Mr. Armbricht moved and Dr. Simonton seconded that the Board encourage the WVDEP to continue working with the USGS to facilitate the study as described today in order to update the hydrological information, and the motion carried unanimously 5 to 0.

In addition, the Board is requesting written comments from all interested persons including the regulated community and the environmental community regarding specific information and/or data which supports their position on the various design flow regimes. While the Board has previously conducted public hearings on the issue and has received many generalized comments, Board members are interested in obtaining the relevant and specific facts pertaining to the opposition to or support of a particular design flow. The Board extended the deadline for such comments until January 16<sup>th</sup>, 2004.

### 3.) Legislative Rule:

Dr. Snyder informed the Board members that the Agency Approved version of the Board's proposed legislative rule (46 CSR1) is being reviewed by the WV Legislative Rulemaking Review Committee (LRMRC). Currently there are four amendments to the rule being proposed by various regulated entities. These proposed amendments cover four basic areas of the rule, including: the approximately 70 new human health criteria included in Appendix C of the rule, all of which were adopted by the Board based on the US Environmental Protection Agency's (USEPA) 2002 criteria recommendations (National Recommended Water Quality Criteria: 2002); the addition of streams to the trout list included in Appendix A of the rule, all of which were adopted by the Board based on the information provided by the WV Department of Natural Resources; the perceived revision to the application of the Category A Use Designation to all state waters; and the revisions to the aquatic life criteria for aluminum and selenium.

Mr. Ambrecht suggested that it would be possible for the Chairman to convene the Board for further discussion on the amendments during the session, if that is necessary. Dr. Jenkins agreed that the Board could be convened if a legislative committee needs clarification regarding a decision made by the Board. However, he suggested that while the Board should be willing to provide such assistance and clarification, that it would be up to the Legislators to make broad revisions, such as to decide not to adopt the list of trout streams proposed in the rule.

Dr. Snyder indicated that in developing the proposed amendments which have been submitted to the Legislature that the Board followed a thorough process of discussion during regularly noticed Board meetings, holding a public hearing and opportunity for written comments, and consideration of those comments according to applicable state law. He expressed concern about short-changing that process by addressing the four amendments from the regulated community – or other amendments that might be proposed - in a shortened time frame and outside of the open process which has already been completed.

The LRMRC did not make any decisions regarding the rule and related amendments but will take up the rule again during the January interim meetings. Dr. Snyder requested that Ms. Chatfield keep the Board apprized of upcoming legislative committee meetings and encouraged all Board members to attend, as their schedules allow. The Board further instructed Ms. Chatfield to continue to attend legislative meetings where the rule is discussed and to provide general information and background on the Board's proposal and, further, to communicate to the Board any requests made by the committees for clarifications of the proposal that would require additional discussion by the Board.

### **III. Administrative Matters**

1.) Review and Approval of the October 30, 2003, Board meeting minutes:

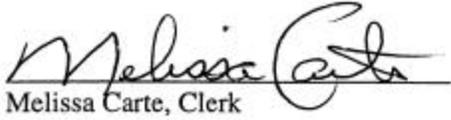
Whereupon the minutes of the October 30, 2003, EQB meeting were presented to the Board for consideration. Mr. Armbrrecht requested that the last paragraph on page four of minutes be revised to clarify that he expressed the concern that because of irregular meeting attendance by Nutrient Criteria Committee members, certain groups may decide at the end of the process that their interests were not adequately represented and that the findings and recommendations of the Committee were made without their having the benefit of participating in the discussion. Dr. Hackney moved and Dr. Jenkins seconded that the minutes of the October 30, 2003, Board meeting, as revised, be approved, and the motion carried unanimously 5 to 0.

2.) Review and Approval of the November 20, 2003, Board meeting minutes:

Whereupon, the minutes of the November 20, 2003, Board meeting were presented to the Board members for consideration. After review, Dr. Hackney moved and Dr. Jenkins seconded that the minutes of the November 20, 2003, Board meeting be approved as written, and the motion carried unanimously 5 to 0.

Whereupon, Mr. Armbrrecht moved and Dr. Jenkins seconded that the December 10, 2003, Environmental Quality Board meeting be adjourned and the motion carried unanimously 5 to 0.

I hereby certify that the forgoing is a true and correct record of the proceedings of the meeting held on December 10, 2003, by the West Virginia Environmental Quality Board. These minutes were approved by the Environmental Quality Board on \_\_\_\_\_, 2004.



Handwritten signature of Melissa Carte in cursive script, written over a horizontal line.

Melissa Carte, Clerk