

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**ENVIRONMENTAL QUALITY BOARD**

1615 Washington Street, East, Suite 301  
Charleston, West Virginia 25311-2126  
(304) 558-4002  
Fax: (304) 558-4116

**MINUTES**

**WEST VIRGINIA ENVIRONMENTAL QUALITY BOARD**

**OCTOBER 30, 2003**

**I. General**

On October 30, 2003, a quorum of the members of the Environmental Quality Board (hereinafter referred to as the ABoard@) met at the conference room of the Office of Environmental Remediation, located at 1356 Hansford Street, Charleston, WV. Dr. Snyder, Chair, called the meeting to order at 9:00 a.m.

Board members present were as follows:

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

Staff members present were as follows:

Libby Chatfield  
Becky Charles  
Melissa Carte  
Kathy Coleman

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

## **I. Remining Variances**

### 1.) Little Boyd Coal Co. Remining Variance Application:

The Board received an application from Little Boyd Coal Company for a remining variance from water quality standards for several streams in Mingo County. During the September 11, 2003, Board meeting, the Board made a preliminary determination that a variance from water quality standards for remining activities as proposed and revised by the applicant is warranted. The Board established a thirty-day public comment period and conducted a public hearing on Wednesday, October 29, 2003. The Board received one written comment from the US Environmental Protection Agency (USEPA) which provided that the USEPA had reviewed the proposed variances and had no objection to their issuance by the Board.

During the October 30, 2003, meeting, the Board concluded its review of the application, the amendments to the application, public comments and additional information received by the applicant. Dr. Jenkins moved that the Board grant Little Boyd Coal Company a variance from water quality standards for remining activities as proposed by the applicant. The pH limits were established as follows: Outlet 001 – 4.2 S.U. to 9.0 S.U.; Outlet 002 – 3.7 S.U. to 9.0 S.U.; Outlet 003 – 4.3 S.U. to 9.0 S.U.; Outlet 004 – 4.5 S.U. to 9.0 S.U.; and Outlet 005 – 3.6 S.U. to 9.0 S.U.

Dr. Hackney then offered an amendment to the motion to specify the manganese limits as follows: Outlet 001 – 6.19 mg/l maximum with a twelve month rolling average of 2.0 mg/l; Outlet 002 - 4.46 mg/l maximum with a twelve month rolling average of 2.88 mg/l; Outlet 003 – 2.87 mg/l maximum with a twelve month rolling average of 1.17 mg/l; Outlet 004 – 1.93 mg/l maximum with no rolling average; and Outlet 005 - 6.04 mg/l maximum with a twelve month rolling average of 2.78 mg/l.

Dr. Jenkins accepted the amendment to his original motion, and Mr. Armbricht seconded the amended motion. The motion as amended carried unanimously 5 to 0. The company was directed to report their in stream values to the Board on a monthly basis.

After further discussion, Dr. Hackney moved and Dr. Jenkins seconded that during the life of the permit the company be allowed one excursion at Outlet 003 from the rolling average limit established for manganese (1.17 mg/l). The one-time excursion may occur during any twelve-month period, but it may not exceed the 2.87 mg/l maximum manganese limit established by the Board. The motion carried unanimously 5 to 0.

## 2. Letter to the Board from U.S. House of Representatives Committee on Resources:

On October 21, 2003, the Board received a letter from U.S. Representative Nick J. Rahall who is the ranking democratic member of the U.S. House of Representatives Committee on Resources. The letter is in regards to the number of NPDES permits for remining activities that have been issued in West Virginia compared to those issued in Pennsylvania, Alabama, Kentucky, Virginia, Ohio and Maryland. There have been 330 NPDES permits issued under this provision of the law and of that number 300 were issued in Pennsylvania, with the remaining thirty issued in the other states. The letter questions why there appears to be “resistance” in West Virginia to issuing NPDES permits.

The Board directed Ms. Chatfield to forward a copy of the letter to the West Virginia Department of Environmental Protection (WVDEP) since they are actually the agency that is charged with issuing NPDES permits for remining activities. Once a company files an application for a NPDES permit for remining activities, they may also seek a variance from the water quality standards for those activities from the Environmental Quality Board.

After discussion, the Board members directed Ms. Chatfield to draft a response letter for the Board Chair’s approval which clarifies the Board’s role, which outlines the actual variance process and which also explains the regulatory requirements. Mr. Armbrrecht requested that it be noted in the letter that the Board does not perceive a resistance by the WVDEP to issuing NPDES permits nor does the Board resist granting the variance requests. Since 1998 the Board has received ten applications for variances from water quality standards for remining activities and of those ten, eight have been granted and two are currently pending before the Board.

Dr. Jenkins noted that he continues to want information to evaluate the success of the Board's remaining variances by reviewing the improvement of the water quality at remaining sites in West Virginia. Dr. Jenkins also expressed an interest in obtaining additional information regarding the program and process utilized in Pennsylvania.

## **II. Rulemaking**

### 1.) Nutrient Criteria Committee:

a.) Funding. The Board members were informed that the WVDEP has been awarded a grant from the USEPA and that the WVDEP has proposed to use a portion of that funding to support the Environmental Quality Board in the development of nutrient criteria. Toward that end, the Board will receive a total of \$60,000 to be utilized by the Nutrient Criteria Committee (NCC). Of that total, \$10,000 is to be used to support the travel and logistics of the Committee members and the remaining \$50,000 is to be utilized for contractual assistance to include the hiring of experts in the field and the collection and analysis of relevant data.

b.) Plan. The Board created the Nutrient Criteria Committee to provide recommendations to the Board regarding water quality criteria for nutrients and a plan for developing such criteria. The Committee's initial plan was submitted to the USEPA for approval on October 29, 2003. The USEPA expressed questions and concerns regarding the plan which were then addressed by the Committee and the Board. The USEPA has now requested that the plan as originally submitted be updated to incorporate the responses provided to the USEPA concerns. After receiving the revised plan, the USEPA will provide a written statement in which they express agreement with the Committee's plan.

c.) Attendance. During the September Board meeting, Mr. Armbricht stated that the Nutrient Criteria Committee was originally created by the Board to encompass a broad and well-balanced membership and questioned the NCC members' meeting attendance, since it appears that some members and/or their alternates are not attending the meetings on a regular basis. He expressed concerns that certain groups may decide at the end of the process that because of irregular attendance by their representatives that their interests were not adequately represented during the discussions and

consequently they may then disagree with the findings and recommendations of the Committee.

At that time the Board requested that staff obtain and review the NCC meeting attendance sheets. Ms. Carte stated that she has attempted to obtain the attendance sheets but to date has not been successful. She further informed the Board members that she attempted to collect this information through a review of the NCC meeting minutes but is not sure of the accuracy of that information. Because of the format of the minutes and the appearance of alternate members who were not originally appointed by the Board, she was unable to say with certainty which groups have been represented during each NCC meeting. Dr. Jenkins stated that the Board should request that all future NCC meeting minutes reflect the attending members and/or alternates and which group or organization that they represent. Ms. Chatfield stated that she would circulate a memo regarding the Board's concerns.

Further, the Board will request that the Chair of the NCC attend the November Board meeting to discuss various issues such as an update of NCC activities and accomplishments, concerns or questions that the Committee members may have, and attendance. In addition, the Board decided to request that a member of the NCC's budget committee attend the November meeting to discuss the funding that has been made available to the Committee.

## 2.) Tier 2.5 Application:

The Board received a nomination to classify two waters in Preston County as Waters of Special Concern (Tier 2.5) according to the provisions of the antidegradation policy in the water quality standards rule. During the May Board meeting, the Board members deemed the nomination application to be complete. Pursuant to 60 CSR 5 (Antidegradation Implementation Procedures), the Board provided a Notice of the Board's consideration of the nomination to the property owners located adjacent to those streams. The Board has scheduled a public hearing in Rowlesburg in Preston County regarding the application on November 20, 2003.

The Board has secured a meeting room for the Board meeting at the Veterans of Foreign Wars (VFW) building in Rowlesburg. The meeting will convene at 1:00 p.m. to discuss the Board's administrative matters such as a

Nutrient Criteria Committee update, the budget update and approval of the Board meeting minutes. Then at approximately 2:00 p.m., the Board members will depart from the Rowlesburg VFW to conduct a site visit of the streams which are the subject of the Tier 2.5 nomination. An official notice of this site visit with a more definitive agenda will be included in the regular meeting notice. This notice will be filed with the WV Secretary of State's Office, e-mailed to all persons on the Board's regular meeting notice list, mailed to all affected landowners and other citizens expressing an interest in the application, and posted on the Board's website.

Although the public is invited to attend the site visit, the Board members will request that public comments be held in abeyance until the public hearing which is being conducted that evening at 6:30 p.m. at the Rowlesburg VFW.

### 3.) Design Flow Regimes:

The Board continued its discussion of various design flow regimes. Cliff Whyte, a permit writer from the Division of Water and Waste Management of the WVDEP presented the Board with comparisons between permit limit calculations based upon the alternate design flows being contemplated by the Board. For demonstration purposes, Mr. Whyte developed three scenarios and used two existing permits (Williamson and Weirton Steel). From these, he calculated permit effluent limits using 7Q10 flow, harmonic mean and 1Q10 flows. Currently, permits are based upon a 7Q10 flow. Mr. Whyte looked at how permit effluent limits would change by using different design flow values. To do this study, he used harmonic mean to assess human health criteria and 1Q10 to assess acute aquatic life criteria and compared the resulting permit effluent limits to those calculated using 7Q10 design flow. The calculations provided are attached to and made a part of these minutes as Exhibit "A".

Some assumptions that Mr. Whyte made due to lack of data for purposes of his analysis were the following:

1. Instream background concentration was assumed to be ½ of the water quality standard;

2. Harmonic mean flow was assumed to be 3 X 7Q10 flow (this assumption was based upon the USEPA Technical Support Document for Water Quality Based Toxics Control);
3. 1Q10 flow was assumed to equal to 85% of the 7Q10 flow (Whyte said although this is not technically valid, he needed a data point and needed to make some assumption).

In the calculation sheets for the five examples studied by Mr. Whyte, “zid” means the zone of initial dilution which is the number of dilutions available when evaluating acute aquatic life criteria. Note: The zone of initial dilution is defined in 46 CSR 1.5.2.b as “the area within the maximum zone where initial dilution of the effluent within the receiving waters occurs and where the concentration of the effluent will be its greatest in the water column. “Cmz” means the chronic mixing zone which is used to evaluate chronic aquatic life criteria and human health criteria.

The sheets summarized the effluent limitations based on a 7Q10 flow assuming that a perfect mixing zone was applicable and the sheets also summarized the effluent limitations using harmonic mean flow for human health and 1Q10 flow for aquatic life. Generally, maximum limits for organics turn out to be higher using harmonic mean than under 7Q10 flow conditions. Permit limits for inorganic parameters, such as copper, however, are more stringent using the alternative flows. All are dependent on the instream waste concentration. Which design flow results in the most stringent permit limits is also dependent upon which criterion governs for each parameter.

Mr. Whyte stated that if harmonic mean flow were used, effluent limits would not differ from the 7Q10 limits in situations where “end of pipe limits” must be imposed and where the WVDEP must assign standard default dilutions. The differences occur where a mixing zone’s physical boundaries are being defined. Importantly, he said, a lot of streams in West Virginia have extremely low critical flow values. End-of-pipe limits, that is, requiring numeric criteria to be met at the end of the discharge pipe rather than developing a mixing zone are used in these low flow situations and there would be no change in permit limits. Most mixing zones are in larger streams not the smaller ones.

Changes in design flow would cause permit limits to change for parameters such as the organics, mercury and cyanide and those where human health criteria generally govern in developing effluent limits. In these cases, the permit limits are higher using harmonic mean flow. On the other hand, permit limits that are typically driven by the acute aquatic life standards, for parameters such as copper, silver, zinc, etc., the use of 1Q10 critical flow values results in lower (more stringent) effluent limits than those calculated by the use of 7Q10 flow.

The degree of change caused by using 7Q10 flow versus 1Q10 flow or harmonic mean flow is dependant upon the instream waste concentration. If the permittee's discharge is 1% of the receiving water, the change of flow regimes can have a big impact. If the permittee's discharge is 20% of the flow in the stream, as in "Scenario 3," the difference in permit limits is not as great. As can be seen in Scenario 1, where the instream waste concentration (IWC) is 90%, there is not much difference between the permit limits calculated using harmonic mean flow versus those using 7Q10 flow. Comparing Scenario 1 (where the IWC was 90%) to Scenario 2 (which assumed an IWC of 50%) one can see the impact of IWC on permit limits. As is demonstrated by Scenario 2 an IWC of 50%, results in greater differences between the permit limits based upon harmonic mean and 7Q10 than where the IWC is 90%.

Mr. Whyte discussed the "Williamson scenario" which is based upon a 2.21% IWC. The differences between the limits calculated by using the alternative flows are appreciably larger than the use of a 7Q10 flow - a factor of about 4, for instance for acrylonitrile. However, limits calculated by using 7Q10 flow are less stringent than limits calculated using harmonic mean or 1Q10 for inorganic parameters.

If the IWC is greater than 80%, then WVDEP assigns end-of-pipe water quality based effluent limits. If the IWC is between 40% and 80% then there is opportunity for a limited amount of dilution. If the IWC is less than 40%, then the permittee may develop a site-specific mixing zone. Mr. Whyte explained that it is important to note that effluent limits only change when developing site specific mixing zones (so where the IWC is above 40 percent, permit limits won't change regardless of the design flow used.) Mr. Whyte also said that it is important to note that it is the IWC in the stream that sets the ceiling for the amount of dilution allowable. Typically, in larger rivers and streams, the differences between limits determined using

7Q10 flows and the other alternative flows are more pronounced due to the relatively small IWC.

The Board also discussed the results of the WVDEP survey of design flows implemented in other states. When the Board expressed an interest in continuing to compile additional information, Joe Dawley of the WVDEP informed the Board that his agency is willing to continue to contact surrounding states and requested that the Board provide him with specific direction regarding the type of information that they would find helpful.

The Board directed Ms. Chatfield to draft a memo, for the Chair's approval, which outlines the information that the Board is seeking regarding design flow regimes in other states. This information includes: 1.) The current design flow regime being implemented in the state; 2.) When the state began implementing their currently effective design flow; 3.) The state's rationale for implementing a particular design flow; 4.) What other design flows have been used in the past; 5.) What, if any, challenges have they experienced in implementing the currently effective design flow regime or other previous design flows and; 6.) Can the state identify any advantages or disadvantages to the current design flow as implemented. Mr. Dawley stated that he would provide the Board with an update during the December Board meeting.

The Board then discussed additional information which may be helpful in the review of the various design flow regimes. Board members requested that Ms. Chatfield contact the US Geological Survey (USGS) to request that a representative attend a Board meeting to discuss exactly what flow data is available from the USGS, their current proposal to WVDEP for collecting new data and also to explain the differences between the various design flow regimes.

The Board is also seeking additional information from the USEPA regarding the methodology used in the development of the risk numbers for carcinogens, the calculation used to develop the criteria for all of the carcinogens, and also the equations and assumptions used. Dr. Jenkins requested assistance from the USEPA in evaluating and addressing the broad concern which exists in the state regarding toxicological factors versus the economic factors. In addition he requested input from a USEPA hydrologist to explain the various flow regimes and a toxicologist who could explain the risk assessment methodology for carcinogens.

In addition, the Board will be 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 hopes to receive the comments by December 19, 2003, in order to allow adequate time to review the comments prior to the January Board meeting. The Board may also solicit additional information during the upcoming Board meetings.

4.) City of Martinsburg:

The Board received an application for a variance from water quality standards from the City of Martinsburg on March 19, 2003, in which the City requested a variance from the numeric criterion for copper in the lower reaches of Tuscarora Creek. During the October 30, 2003, Board meeting, the Board was scheduled to conduct a preliminary review of the variance application. However, pursuant to a request by the applicant, the discussion of the variance application has been continued indefinitely.

### **III. Appeals**

1.) Appeal #03-12-EQB (Sylvan Grove Waste Treatment):

Appeal #03-12-EQB (Sylvan Grove Waste Treatment) was filed with the Board on July 3, 2003, and the evidentiary hearing was scheduled to be conducted during the October 30, 2003, Board meeting. However, on October 28, 2003, the parties to the appeal filed a proposed Order for the Board's review. This proposed Order resolves the issues of the appeal without the need for an evidentiary hearing. After a review of the proposed Order, Dr. Hackney moved and Dr. Jenkins seconded that the proposed Order be approved by the Board and that Appeal #03-12-EQB be removed from the Board's docket, and the motion passed unanimously 5 to 0.

2.) Appeal #03-14-EQB (Broadway Industrial Park):

On September 19, 2003, Mr. Ransford Heckert filed Appeal #03-14-EQB on behalf of Broadway Industrial Park. Then on October 8, 2003, the Board

received a request to amend the Appeal to also include Mr. Ransford Heckert individually as a party to the appeal (as an Appellant). The Appellee did not file a response to the Motion to Amend the Appeal. After discussion, Dr. Hackney moved and Dr. Jenkins seconded that the Board grant the Motion to Amend the Appeal, and the motion carried unanimously 5 to 0. Mr. Heckert individually, will now be a party in the appeal, as an Appellant.

#### **IV. Administrative Matters**

1.) Review and Approval of the September 11, 2003, Board meeting minutes:

The minutes of the September 11, 2003, Board meeting were presented to the Board for consideration. After review, the minutes were revised to correct a typographical error. Whereupon, Dr. Jenkins moved and Dr. Hackney seconded that the minutes of the September 11, 2003, Board meeting, be approved as revised, and the motion carried unanimously 5 to 0.

2.) Dates for future Board meetings:

The Board scheduled public meetings on December 10, 2003, beginning at 1:00 p.m., and December 11, 2003, starting at 9:00 a.m. In addition, the Board selected January 8, 2004, February 26, 2004, and March 18, 2004, for Board meeting dates.

Whereupon, Dr. Hackney left the meeting.

3.) Budget Report:

The Board members reviewed the budget report provided by Ms. Coleman. A copy of the report is attached to and made a part of these minutes as Exhibit "A". As of September 30, 2003, the Boards have spent 24.77% of the combined budgets which represents a three month period or 25% of the fiscal year.

It was noted that, at the request of Mr. Armbrecht, the standard budget report has been revised to include an additional column which reflects the year-end total expenditure for the previous fiscal year for each line item. In order to compare current budget amounts to the actual expense incurred during the

previous fiscal year, Mr. Armbrrecht requested that a “year-to-date” column which reflects the expenditure for each line item in 2003 be included in the budget report and placed next to the fiscal year 2004 “year-to-date” expenses column. Ms. Colman noted that due to budget cuts, the 2004 budget is approximately \$26, 000 less than the previous year.

#### 4.) Purchasing Card Report:

The Board members were provided with the quarterly Purchase Card report which details the purchases made by authorized staff members for the months of July 2003 through September 2003. After a review of the report, Mr. Armbrrecht moved and Dr. Simonton seconded that the Board approve the Purchase Card report, and the motion carried unanimously 5 to 0.

#### 5.) Website Update:

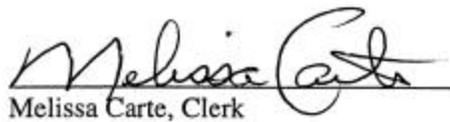
The Board members were informed that new EQB website address is [www.wveqb.org](http://www.wveqb.org) . The Board has also registered the “.net” and “.com” domain names, and anyone who enters one of those extensions (the .com or the .net) will automatically be forwarded to the Board’s website at the “.org” address.

Currently, the EQB website contains a page which allows users to search all Board orders. In the near future staff will be launching an additional page on the website which will contain, in a searchable format, all of the Circuit Court Orders and Supreme Court Orders which relate to the EQB Final Orders. These Court Orders have already been scanned and converted to Adobe format and staff is currently entering the appropriate key words to be used when searching the Orders.

In addition, the staff’s email addresses have also changed and no longer reflect an association with the DEP in the addresses. The Clerk’s email address is now [clerk@wvaqbeqb.org](mailto:clerk@wvaqbeqb.org)., Ms. Charles’ address is [bcharles@wvaqbeqb.org](mailto:bcharles@wvaqbeqb.org), Ms. Chatfield’s is now [lchatfield@wvaqbeqb.org](mailto:lchatfield@wvaqbeqb.org) and Ms. Coleman’s new address is [kcoleman@wvaqbeqb.org](mailto:kcoleman@wvaqbeqb.org) .

Whereupon, Mr. Ambrecht moved and Dr. Jenkins seconded that the October 30, 2003, Environmental Quality Board meeting be adjourned and the motion carried unanimously 4 to 0.

I hereby certify that the forgoing is a true and correct record of the proceedings of the meeting held on October 30, 2003, by the West Virginia Environmental Quality Board. These minutes were approved by the Environmental Quality Board on December 10, 2003.

  
Melissa Carte, Clerk