

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL QUALITY BOARD**

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MINUTES

WEST VIRGINIA ENVIRONMENTAL QUALITY BOARD

MAY 8, 2003

I. General

On May 8, 2003, a quorum of the members of the Environmental Quality Board (hereinafter referred to as the ABoard@) met at its 2nd floor conference room located at 1615 Washington Street, Charleston, West Virginia. Dr. Snyder, Chair, called the meeting to order at 8:30 a.m.

Board members present were as follows:

Ed Snyder, Chair
Bob Jenkins
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:

II. Rulemaking

1. Weirton Steel

a.) Socio-economic Variance Request:

The USEPA has prepared economic guidelines for establishing socio-economic variances from Water Quality Standards including the financial and socioeconomic effects of providing additional treatment in a stream in order to comply with the applicable state water quality standards.

The initial site-specific variance from water quality standards for a section of Harmon Creek was granted to Weirton Steel by the Board in 1985 and was subsequently renewed, with modifications, by the WV Legislature during the 1998 legislative session. This variance, as it is currently contained in 46 CSR 1 (“Requirements Governing Water Quality Standards”), will expire on June 29, 2004. Socio-economic variances must be reviewed every three years.

Mark Vignovic, a Weirton Steel representative, appeared before the Board to present the variance request and provided the Board members with an additional handout dated May 8, 2003, regarding the variance proposal. The Board members were provided with a letter dated May 1, 2003, from Weirton Steel requesting that the socio-economic variance from the water quality standards, for a section of Harmon Creek that stretches from its confluence with the Ohio River to a point 2.2 miles upstream, be extended until July 1, 2007. Discharges to Harmon Creek are made through Outlet 004. The parameters contained in the proposed site-specific socio-economic variance request include iron, lead, and temperature. The company is also requesting a modification to the reporting requirements, to allow them to submit the monitoring reports to the WV Division of Water and Waste Management on an annual basis.

In support of the proposed extension of the variance, Weirton Steel provided the Board with documents including: Financial and Socio-economic Effects of Compliance with West Virginia Water Quality Regulations at Harmon Creek; Drinking Water Use Survey of Harmon Creek between Outfall 004 and the Confluence at the Ohio River; and Evaluation of the Control

Technologies for Reducing Metals and Temperature in the Wastewater Discharge at NPDES Outfall 004.

In addition the company submitted information in support of the continued historic removal of the Category A (public drinking water) use designation from Harmon Creek. The effect of this use removal is that the Company is not required to meet the fluoride limits contained in the water quality standards since that parameter relates only to that particular use category.

The Board has not received any comments from the USEPA at this point, however, they may comment during the public comment period. Further, although the WV Department of Environmental Protection's Division of Water and Waste Management has indicated that it is supportive of the revised language they have not yet submitted written comments.

After discussion, Mr. Armbrecht moved and Dr. Simonton seconded that the Board grant the socio-economic variance to Weirton Steel as requested, and the motion carried unanimously 5 to 0. The variance is located at section 7.2.d.16.2 of the Water Quality Standards rule (46 CSR 1).

b.) Half-mile Rule Exemption:

Section 7.2.a.2. of the water quality standards rule provides that any discharge point which is located within a half-mile upstream from a public water supply intake must meet the criteria for public water supply (Category A) at the point of discharge (end of pipe). This is commonly referred to as the half-mile rule.

Weirton Steel Corporation's drinking water intake is located less than a half-mile downstream from one of its discharge points (Outfall 002). However, the Company currently has an exemption from the provisions of section 7.2.a.2. of the Water Quality Standards rule. This exemption was first granted to the Company in 1997, and during the December 17, 2002, Board meeting, the Board agreed to an extension of that variance until September 1, 2004, in order to include the variance in the Board's regular triennial review process. The Board submitted that revision to the WV Legislature and it was approved during the 2003 session.

During the May 8, 2003, EQB meeting, the Board members reviewed a letter dated May 1, 2003, submitted by Weirton Steel regarding a request for a continued exemption from the provisions of the half-mile rule (section 7.2.a.2). The Weirton Steel request proposes extending the exemption until September 1, 2010, but limits the exemption to the iron parameter. The company stated that the discharge at Outfall 002 is in compliance with all other Category A water quality base effluent limits.

Weirton Steel stated that they have explored several other options and alternatives to the half-mile rule exemption but to date none have been found by the company to be feasible. One avenue explored was hooking onto the City of Weirton's public drinking water system. Although they have agreed to continue discussions with the City of Weirton, the company stated that they would need to secure an additional 10 million to 13 million dollars from outside sources in order to make that option economically feasible. Further, the company estimates that it would cost 1.8 million dollars to construct a new drinking water intake. Also, the company stated that additional treatment to the water at the discharge point would cost the company 60 million dollars initially with an annual 2.04 million dollar operating cost.

The Board members were also provided with a letter dated May 2, 2003, from the WV Bureau for Public Health in which the Agency expresses strong concerns regarding the continued exception to the language of section 7.2.a.2 for Weirton Steel. They state that the continued exemption from the half-mile rule will compromise the reliability and increase the probability that violations of the federal Safe Drinking Water act or the state Water Quality Standards rule will occur, thus endangering the health of the plant workers. Further, they stated that they have not been provided with an economic analysis regarding the costs of the alternatives or options to the half-mile rule exemption.

After discussion, Dr. Hackney moved and Mr. Armbricht seconded that the Board grant Weirton Steel's request to continue its an exemption from the provisions of section 7.2.a.2. for iron until July 1, 2010, and require a status report to filed with the Board on March 1, 2007, and the motion carried unanimously 5 to 0.

2. Triennial Review:

The Board is conducting its federally mandated triennial review of the legislative rule, 46 CSR 1, “Requirements Governing Water Quality Standards”. The Board published a public notice of this review and accepted comments and suggestions from all interested parties through September 2002. The Board continued discussions of the comments received and issues to be addressed during the review as outlined below:

Trout Waters:

Appendix A. The current list of Trout Waters (Category B-2) contained in Appendix A of the Rule is outdated. Mike Shingleton of the WV Department of Natural Resources (DNR) provided the Board with an updated list of Trout Waters which includes naturally reproducing trout streams and streams which support year-round trout populations. Dr. Jenkins moved and Dr. Simonton seconded that the Board accept the DNR recommendation to include additional streams on the Trout Water Category B-2 list (Appendix A) by expanding the list to include those newly identified by DNR, and the motion carried unanimously 5 to 0.

Also, Mr. Shingleton suggested that some of the waters that are currently contained in Appendix A of the rule should be removed since they do not support year-round trout populations. Mr. Shingleton stated that there has not been degradation of these waters which would necessitate the use removal but rather that these waters (approximately nine) were included on the Trout Water list when it was initially created many years ago. At that time the list included not only streams that were naturally reproducing trout streams or which support a year-round trout population, but also waters which were stocked with trout by the DNR.

Ms. Chatfield stated that the removal of a water-body from that list of Trout Waters (Appendix A) could be a lengthy process and must be scientifically justified. The Board opted not propose the removal of the streams in this current triennial review. In order to begin the use removal process the Board will include in the Public Notice of the Triennial Review a statement that the Board may be removing certain streams from that list in the future.

46-1-2. Definitions. Section 2.20. The current definition of “Trout Waters” contained in the rule provides that: “Trout waters are streams or stream

segments which sustain year around trout populations excluded are those streams or stream segments which receive annual stockings of trout but do not support year-around trout populations.” After discussion, Dr. Simonton moved and Dr. Jenkins seconded that the Board opted to retain the definition of “Trout Waters” as it is currently in the rule, and the motion carried unanimously 5 to 0.

Appendix E. Section 8.28.3. - Temperature for Trout Waters. This section provides that: “No heated effluents will be discharged in the vicinity of spawning areas. The maximum temperatures for cold waters are expressed in the following table”. After discussion, Dr. Jenkins moved and Dr. Simonton seconded that this section should be clarified by changing the term “cold waters” to “trout waters”, and the motion carried unanimously 5 to 0. In addition, Dr. Simonton moved and Mr. Armbrrecht seconded that the listing of the months contained in that table be clarified by listing: October through April, September and May, June through August, and the motion carried unanimously 5 to 0.

Appendix E:

Section 8.12. Dissolved Oxygen. The Board received comments from some members of the regulated community regarding the dissolved oxygen criteria. One suggested that the Board adopt the 1986 USEPA Gold Book criteria. Another commenter suggested revising the dissolved oxygen criteria in trout waters to not less than 6 milligrams per liter average concentration over twenty-four hours, and not less than 5 milligrams per liter average concentration over twenty-four hours for warm water. After discussion the Board opted to retain the dissolved oxygen criteria as it is currently in the rule.

The Board further discussed the possibility for using the natural background exemption to allow for site specific revisions to the dissolved oxygen criteria were appropriate. After discussion, Dr. Simonton moved and Dr. Jenkins seconded that the Board revise section 7.2.b. of the rule to allow for a natural background variances for trout waters, and the motion carried unanimously 5 to 0. That section will now read in pertinent part: “NOTE: with the exception of section **7.2.c.4** and 7.2.c.5. listed herein exceptions do not apply to trout waters nor the requirements of Section 3 herein.”

Section 8.13. Fecal Coliform. Previously the Board considered removing the fecal coliform criteria from section 8.13 of Appendix E of the rule and replacing it with an *E. coli* standard. After further discussion, Dr. Jenkins moved and Dr. Simonton seconded that the Board retain the current fecal coliform criteria in section 8.13 of Appendix E of the rule, but to also include a provision which allows that if a sample tested for fecal coliform shows noncompliance, then further testing of the sample for *E. coli* can be allowed to determine compliance. If the *E. coli* testing indicates that the sample meets EPA's recommended criteria this will suffice for meeting the fecal coliform criteria. The motion carried unanimously 5 to 0.

Section 8.32. Turbidity. Included in the comments submitted to the Board by the DEP was a suggestion that the Board update the terminology in this section by deleting or replacing the references to the 208 water quality plan with "nonpoint source management plan". That section will now read in pertinent part that "This rule shall not apply to those activities at which Best Management Practices in accordance with the State's adopted NonPoint Source Management Plan are being utilized, maintained and completed on a site-specific basis or at which an approved Federal or State Surface Mining Permit is in effect..." Dr. Hackney moved and Mr. Armbrecht seconded that the Board adopt this proposed change, and the motion carried unanimously 5 to 0.

Additional comments regarding the turbidity criterion were received. The comments contained a request that the Board consider removing the current exemption from the turbidity criterion which applies to surface mines. After discussion the Board opted to retain the exemption in the rule but Mr. Armbrecht moved and Dr. Jenkins seconded that the Board include in the Notice of the Triennial Review that the Board is considering the request for the removal of that exemption for surface mining in order to solicit comments on the issue, and the motion carried 4 to 0. Dr. Hackney abstained from the vote.

III. Administrative Matters

1. Review and Approval of the Minutes of the April 16th & 17th, 2003, EQB meeting:

The minutes of the April 16th and 17th Board meeting were presented to the Board for consideration. Ms. Carte reviewed two corrections that had been

made by staff to the draft minutes after they had been provided to the Board members in the regular meeting packet. After discussion, Dr. Jenkins moved and Dr. Simonton seconded that the minutes of the April 16th and 17th EQB meeting, as presented, be adopted, and the motion carried unanimously 5 to 0.

2. Budget Report:

Ms. Coleman provided the Board members with a monthly budget report which was included in the regular meeting packet. Ms. Chatfield reviewed the budget information with the Board members. As of April 30, 2003, the Boards have spent 76% of the combined budgets which represents a ten month period or 83% of the fiscal year. A copy of the budget report is attached to and made a part these minutes as Exhibit "A".

3. Reimbursement of Expenses:

Previously, when discussing options for reducing the cost of Board meetings, the Board members voted to discontinue the automatic \$55.00 expense payment and require reimbursement of hotel and meal expenses to be receipt based with a cap of \$115.00. The Board members will continue to receive mileage expenses and the \$150 per diem.

Dr. Hackney stated that he vehemently objects to the receipt based expense reimbursement policy since he brings his lunch to the meetings. The Board determined that he could simply estimate the cost of his meals when not dining out and provide the information to Ms. Coleman for use in calculating his reimbursement.

4. Calendar of Events for May and June

The Board members reviewed the calendar of upcoming events for the months of May and June.

5. Nutrient Criteria Committee:

The US Environmental Protection Agency directed that all states must adopt nutrient criteria for the various water body types and ecoregions by the end of 2004. In response, the Board created a Nutrient Criteria Committee to review and analyze existing data, identify the additional information needed,

and use such information to provide recommendations to the Board regarding development of nutrient criteria. The Nutrient Criteria Committee prepared a plan and timeline for the development and adoption of nutrient criteria. This plan, as modified by the Board, was submitted to the USEPA in October 2002 for their approval.

The USEPA's response to the West Virginia Nutrient Criteria Development plan contained some suggestions and questions regard a few aspects of the proposed plan. During the May meeting the Board members reviewed the letter from Wayne Appleton, who is a member of the Board's Nutrient Criteria Committee (faxed to the Board on March 26, 2003), which clarified the Nutrient Criteria Committee's plans for the development of nutrient criteria.

After discussion, Dr. Jenkins moved and Mr. Armbrrecht seconded that the Board Chair send a letter to the USEPA which addresses all of the issues and areas of concern raised by the USEPA during their review of the Board's proposed Nutrient Criteria Development Plan, and the motion carried unanimously 5 to 0.

6.) USEPA Approvals:

The Board members were provided with a letter dated April 17, 2003, from the USPEA regarding USEPA approval of the state's adopted iron criteria for chronic aquatic life and human health, which is 1.5 mg/l. The USEPA's the withdrawal of the outstanding disapproval of these provisions and the subsequent notification, approves these criteria in the water quality standards for Clean Water Act purposes.

The Board members were also provided with a letter dated April 17, 2002, from the USEPA regarding the revisions to the state's water quality standards which were proposed by the Environmental Quality Board and approved by the state Legislature on May 2, 2001. These revisions were provided to the USEPA on Jun 21, 2001. The USEPA has completed its review of the state's new and revised water quality standards and has approved these revisions.

In addition, the USEPA stated that they have reviewed the scientific literature for aluminum and recognized that there are scientific references supporting the approval of dissolved aluminum. The USEPA has approved

the state's revised aluminum criteria subject to the completion of Endangered Species Act consultation with the US Fish and Wildlife Service.

IV. Rulemaking

The Board then resumed discussion of the triennial review issues.

Appendix E:

Section 8.18. Mercury. After discussion Mr. Armbrrecht moved and Dr. Simonton seconded that the Board retain section 8.18 in Appendix E which contains the human health total body burden value for mercury of 0.5 ug/g, and the motion carried unanimously 5 to 0.

Further, Dr. Simonton moved and Dr. Jenkins seconded that, in section 8.18.1 of Appendix E of the rule the Board retain the in-stream total mercury value of 0.15 ug/l for human health Category "C" and a human health Category "A" mercury value of 0.14 ug/l and also that the Board delete the acute aquatic life value of 2.4 ug/l from that section, and the motion carried unanimously 5 to 0.

In addition, Dr. Simonton moved and Dr. Jenkins seconded that the Board adopt dissolved mercury values for Aquatic Life Acute 1.4 ug/l and Aquatic Life Chronic of 0.77 ug/l with the appropriate conversion factor, and the motion carried unanimously 5 to 0. Dr. Jenkins moved and Dr. Simonton seconded that the Board delete the methylmercury parameter in section 8.18.2. from Appendix E of the rule, and the motion carried unanimously 5 to 0.

Section 8.7.1. Cadmium. The rule currently includes a cadmium value of 10 ug/l for the Ohio River main stem zone one (section 8.7.1). However, Ohio River Valley Water Sanitation Commission (ORSANCO) which establishes water quality standards for the Ohio River, no longer retains this parameter in their water quality standards. Dr. Simonton moved and Dr. Hackney seconded that the Board remove the cadmium parameter specific to the Ohio River from the Board's Water Quality Standards, and the motion carried unanimously 5 to 0.

Alkalinity. After discussion, the Board opted not to adopt a value for alkalinity during this triennial review.

Section 8.2.1. Ammonia. This section contains a reference to footnote “d”. After discussion, Mr. Armbrecht moved and Dr. Hackney seconded that the Board revise footnote (d) to reflect the term early life stage “present” equation, and the motion carried unanimously 5 to 0.

The Board also discussed the Human Health Category A value for ammonia (50 ug/l) as it is currently in the rule and opted to retain that value. However, later in the meeting, Dr. Hackney moved and Dr. Simonton seconded that the Board remove Human Health value of 50 ug/l for ammonia, and the motion carried unanimously 5 to 0.

MISCELLANEOUS

The DEP suggested in their comments that the Board clarify the “**Not to Exceed**” language which appears throughout Appendix E, in light of the footnotes at the end of Appendix E which outline the frequency and duration requirements. Dr. Hackney moved and Dr. Simonton seconded that the Board revise the current Appendix E to more closely resemble the USEPA table and delete the “not to exceed” language where necessary or appropriate, and the motion carried unanimously 5 to 0.

In addition, the DEP requested that the Board include language regarding method detection limits (**MDL**) for use with the numeric criteria. The Board previously decided not to address this issue during the current triennial review. Ms. Chatfield did however speak with Cheryl Atkins of the USEPA regarding whether other states address method detection limits and it was determined that most states do not have MDLs in their water quality standards

46-1-7. West Virginia Waters.

Section 7.2.c.5. Blackwater River. The Board previously voted that in order to be consistent within the rule, to move the language contained in this section (7.2.c.5.) to section 7.2.d. of the rule since this section contains the approved site-specific criteria, variances and use reclassifications. Ms. Chatfield reviewed the change with the Board members and noted that the reference to the Division of Environmental Protection to the Department of Environmental Protection.

46-1-2. Definitions.

Wet Weather Streams. The Board previously decided not to make a change to the definition of Wet Weather Streams by adding “unlined ditch” to the definition as requested by the DEP unless there was a persuasive argument by the DEP for such change. Ms. Chatfield stated that the DEP has not provided the Board with a response. Consequently the Board will not change the definition of wet weather streams.

Aquatic Life. The Board previously decided not to adopt a definition of “Aquatic Life” as requested by the DEP unless there was persuasive argument by the DEP for inclusion of the definition. Ms. Chatfield stated that the DEP has not provided the Board with a response. Consequently the Board will not add a definition of aquatic life to the rule.

Appendix E.

The Board then began a review of the criteria currently contained in the water quality standards with values that are more stringent than the USEPA recommended value or for which the USEPA does not have a recommended value:

Section 8.6. Beryllium. Currently the water quality standards rule contains an acute aquatic life value for beryllium of 130 ug/l and a Human Health Category A value of .0077 ug/l. The USEPA does not currently have a recommended aquatic life value. Dr. Hackney moved and Dr. Simonton seconded that the Board remove the aquatic life value for beryllium from the rule and adopt the Human Health for Category A value of .004 milligrams per liter since that is the USEPA recommended value, and the motion carried unanimously 5 to 0.

Section 8.9.1. Hexavalent Chromium. After discussion, the Board opted to retain the values as they are currently in the rule.

Section 8.9.2/8.9.3. Trivalent Chromium. After discussion, Dr. Simonton moved and Dr. Jenkins seconded that the Board adopt the aquatic life conversion factors for trivalent chromium as recommended by the USEPA and the motion carried unanimously 5 to 0.

Section 8.10. Copper. Dr. Hackney moved and Dr. Jenkins seconded that the Board adopt the current USEPA recommended human health Category A value for copper, and the motion carried unanimously 5 to 0. The copper value for Category A will be changed from 1000 ug/l (current standard) to 1300 ug/l (USEPA standard).

Section 8.14. Fluoride. After discussion, the Board opted to retain the fluoride value as it is currently in the rule.

Section 8.8. Chloride. After discussion the Board opted to retain the Human Health Category A & Category C values as they are currently in the rule.

Section 8.21. Nitrite. Aquatic Life Acute. Dr. Hackney moved and Dr. Simonton seconded that the Board remove the aquatic life acute values for nitrite from the rule, and the motion carried unanimously 5 to 0.

V. Harmonic Mean Flow:

The Board is considering the adoption of USEPA's recommended design flow conditions, including harmonic mean flow, to be applied in implementing the numeric criteria in the Water Quality Standards. At 3:00 p.m. the Board conducted a public hearing to provide interested parties with the opportunity to present information and comments regarding the potential impacts of revising these design flows.

Stephanie Timmermeyer, Secretary of the Department of Environmental Protection (DEP) addressed the Board and presented the Board with a letter stating the DEP's position. Secretary Timmermeyer stated that while the DEP suggested in its 2002 public comments that the Board consider the adoption of harmonic mean flow, the Department assumed that the Board would undertake a thorough review of the issue. The DEP does not support a rush decision on whether to adopt harmonic mean flow and requested that the Board research and carefully evaluate all of the ramifications of adopting harmonic mean flow, including any scientific data, the public welfare and fiscal responsibility. Further, the DEP does not currently have the appropriate data with which to implement harmonic mean flow. A copy of the letter provided by Secretary Timmermeyer is attached to and made a part of these minutes as Exhibit "B".

Secretary Timmermeyer also provided the Board with a letter from Governor Wise in which he strongly recommends that the Board thoroughly evaluate the merits of the proposal and not adopt harmonic mean flow at this time. A copy of the letter from Governor Wise is attached to and made a part of these minutes as Exhibit "C".

Charles Armstead, representing DOW Chemical Company appeared before the Board to support the adoption of harmonic mean flow. Mr. Armstead stated that the Board is currently adopting some of the USEPA's recommended criteria in the state's water quality standards rule and should also adopt the calculation method used by the USEPA for each criterion.

Dan Ramsey, of the US Fish and Wildlife Service, provided the Board with information regarding harmonic mean flow. Mr. Ramsey stated that currently the DEP uses 7Q10 design flow method to calculate effluent limitations for parameters for both Category A (Human Health) and Category B (Aquatic Life) use designations. Although the proposed adoption of harmonic mean flow is for Category A, the US Fish and Wildlife Service is concerned that the adoption of that design flow could result in increased pollutant levels of some parameters in the waters and could impact threatened and endangered species of aquatic life. He noted that several carcinogens do not have USEPA recommended criteria for the protection of aquatic life.

Brenda Burbach of Carpenter Environmental Services addressed the Board on behalf of the Affiliated Construction Trades Foundation (ACT). ACT opposes the adoption of the harmonic mean flow as the critical design flow for carcinogens for two reasons. First, she explained that the state has not adequately investigated the impact that the increased pollutant levels and carcinogen loadings would have on all rivers and streams in the state; second she explained that the rationale for adopting harmonic mean flow as the critical design flow is based on the assumption that the linear lifetime model for exposure to carcinogens is correct. ACT requested that the state fully investigate the potential for increased cancer risk to the citizens of the state.

Ms. Burbach stated that because the harmonic mean flow is always greater than the 7Q10 flow, the use of harmonic mean flow would result in less stringent permit discharge limitations and allow an increase in the discharge of cancer causing substances. The increase in the discharge of carcinogens

into the state's waters has the potential to result in an unquantified increase in health care costs.

She also provided the Board with a study by Carpenter Environmental Services which was conducted to determine the effect of the proposed rule change to allow the use of harmonic mean flow as the design flow for wasteload allocation for carcinogens. The study developed the harmonic mean flow for locations on the Ohio River (at Huntington), the Kanawha River (at Charleston), and the Greenbrier River (at Hillsdale). Based on their analysis the proposed change to harmonic mean flow would result in significant increase in the amounts of carcinogens that are allowed to be discharged into the waters of the state.

She further suggested that before the Board considers adopting harmonic mean flow they must conduct significant studies to determine: a.) The actual need for revisions to the critical design flow by conducting a review and evaluation of the compliance history of all facilities that currently have permit limits for carcinogenic pollutants to determine the number of existing dischargers that are consistently unable to meet their current permit limits for carcinogen pollutants; b.) The actual health impacts by reviewing all scientific data to determine the number of increased cancer cases likely in West Virginia as a result of the change from 7Q10 to harmonic mean flow, which takes into account both increased cancer cases associated with carcinogens that follow the linear lifetime exposure model and the non-linear threshold model; and c.) The actual economic impact by comparing the realized savings for new and existing dischargers and the impacts to economic growth to the cost of increased cancer cases in the state including both health care costs as well as lost earnings.

Liz Garland spoke to the Board on behalf of the WV Rivers Coalition against the adoption of harmonic mean flow. The Rivers Coalition believes that using harmonic mean flow will allow more carcinogenic pollutants to be discharged into the waters of the state and provided the Board with a study which demonstrates that a change from 7Q10 to harmonic mean flow, when applied to specific permitted operations in West Virginia, would increase the carcinogens in the Kanawha and Ohio Rivers.

Ms. Garland stated that the Clean Water Act establishes guidelines and regulations which uphold its intent to restore and maintain the chemical, physical, and biological integrity of the waters of the state by eliminating the

discharge of pollutants. The Clean Water Act also contains an anti-backsliding provision which provides that re-issued permits can be no less protective than previously issued permits. Since harmonic mean flow would allow more pollutants to be discharged, any permit that presently applies 7Q10 but switches to harmonic mean flow would be in violation of the Clean Water Act and subject to legal challenge.

Ms. Garland expressed serious concerns regarding the impact that the use of harmonic mean flow and the increase in carcinogenic loading in the state's streams could have on human health and that discussions with state health personnel, toxicologists and risk assessors, indicates that there is currently insufficient data to directly measure health changes. She suggested that the appropriate collection of data is crucial before the Board adopts harmonic mean flow. Also since permits do not include discharge limits for all carcinogens cumulative impacts which may increase the toxicity of receiving waters was another area of concern.

Ms. Garland also questioned the economic impacts of adopting harmonic mean. She stated that the following cost/benefits should be studied: the financial gain afforded to industries discharging pollutants; the cost to regulators in the accumulation of accurate data sets; the comprehensive costs of monitoring, limiting and reporting of all pollutants discharged; and the cost to the citizens and the state realized in the potential increase in cancer and associated health care cost.

David Yaussy provided the Board with a written statement from the WV Manufacturer's Association but did not speak on their behalf. He did, however, make a personal statement to the Board in support of the adoption of harmonic mean flow for purposes of implementing the criteria for carcinogens in NPDES permits. He feels that the standard of 10^{-6} cancer level (one in a million), is a very safe. Further, the use of harmonic mean flow is scientifically defensible, it has been recommended by USEPA and has been implemented in other states. He suggested that since there is an apparent lack of data, the Board could apply harmonic mean flow were there is sufficient data for calculating it as the DEP continues to collect the necessary data.

Further, Mr. Yaussy offered that it is his opinion that it would be impossible to determine how NPDES permits would be affected by the adoption of harmonic mean flow because there are many factors and variables which

could affect the permit limit which go beyond just the design flow criteria. For example, there are other water uses categories that could be limiting for the same parameter and the anti-backsliding provisions of the Clean Water Act would need to be considered and consequently any discharge increase would likely have to go through an antidegradation analysis which requires public comment and full public participation in the process. Mr. Yaussy urged the Board to “adopt harmonic mean flow and let the chips fall where they may, because it is the right thing to do.”

Robin Godfrey, an attorney in Charleston, appeared before the Board to speak against the adoption of harmonic mean flow. He stated that West Virginia already has a very high cancer rate and that the Board should not allow more carcinogens to be discharged into the waters of the state. He has been touched on a personal level by cancer and stated that the risk of an increased cancer rate is unacceptable. He stated that cancer affects everyone either through increased medical costs, illness and loss of income, loss of productivity, and the emotional devastation. Further, Mr. Godfrey stated that businesses will not be attracted to this state if the state cannot provide a safe and healthy environment for its employees. He also asserted that while he does not have a technical background and has only anecdotal comments to present, it is not the public’s burden to prove that the discharge level of carcinogens allowed through harmonic mean flow is not safe, but that it should be the industries burden to prove that it is safe. He does not feel that they have provided any such evidence.

Steve White of the Affiliated Construction Trades Foundation addressed the Board in opposition to the adoption of harmonic mean flow. He stated that he has not heard any legitimate arguments, evidence or scientific data presented to the Board which would support a change from the current 7Q10 design flow to harmonic mean flow. Mr. White questioned the need for the change and urged the Board not to adopt harmonic mean flow.

In addition to the oral statements given during the Board meeting, written comments on the harmonic mean flow issue have been submitted by the WV Chamber of Commerce, the WV Municipal Water Quality Association, WV Rural Water Association, the League of Women Voters, WV Trout Unlimited, the WV Rivers Coalition, Affiliated Construction Trades Foundation, US Fish and Wildlife Service, the WVDEP and Governor Wise.

After discussion, the Board opted to remove from consideration during the current triennial review process the adoption of harmonic mean flow. Mr. Armbrrecht moved and Dr. Simonton seconded that the Board should continue to study the proposed move from 7Q10 to harmonic mean flow. Mr. Armbrrecht further requested that over the next few months that the Board Chair and staff members work in conjunction with the DEP to develop a “road map” that the Board may use to further review and study harmonic mean flow in order to gain a full understanding of all of the issues associated with the adoption of that design flow. Dr. Snyder also requested that significant and continuing dialogue and input from all interested parties (in addition to the DEP) be included in the plan. The motion carried unanimously 5 to 0.

Dr. Hackney left the meeting at the conclusion of the public hearing regarding harmonic mean flow.

VI. Rulemaking

The Board then resumed discussion of the triennial review issues.

General Comments:

Water Quality Standards and Groundwater Standards. The Board previously reviewed the comments from the DEP regarding the differences between numeric criteria in the Groundwater Standards and the Water Quality Standards Category A criteria. Ms. Chatfield stated that while discrepancies to exist between the human health criteria developed pursuant to the federal Clean Water Act and the federal Safe Drinking Water Act, the Board has followed the appropriate state and federal recommendations and requirements in establishing numeric criteria in both the Water Quality Standard applicable to surface water and the Groundwater standards in the two rules. During that discussion the Board requested that the DEP provide the Board with specific situations where the discrepancies between the two sets of criteria cause a conflict in carrying out the agency’s regulatory function. The DEP did not provide the Board with any examples of problems. Dr. Simonton moved and Dr. Jenkins seconded that while the Board may want to continue to review the matter in the future, the Board take no action on the issue during this current triennial review, and the motion carried unanimously 4 to 0.

Category A. The Board acknowledged the comments received from the WV Manufacturer’s Association, the WV Chamber of Commerce, and Allegheny Energy regarding the statewide application of Category A. The Board members stated that they have continued to attempt to address this issue by promulgating a procedural rule which establishes an expedited process to remove the Public Water Supply Use Designation (Category A) on a site specific basis. The Board is currently awaiting comments from the WV Legislative Rulemaking Review Committee on this procedural rule.

46-1-9. Establishment of Safe Concentration Values.

Section 9.2.a. Cumulative. The WV Manufacturer’s Association requested that the Board adopt the Great Lakes Initiative for determining whether a substance is bioaccumulative. After discussion Dr. Simonton moved and Dr. Jenkins seconded that the Board include in the Notice of the Triennial Review that the Board is considering a request to adopt the Great Lakes Initiative Standard for determining whether a substance is bioaccumulative in order to solicit further comments on the issue, and the motion carried unanimously 4 to 0.

Appendix E.

All Other Uses Category. The Board discussed the current values contained in the “all other uses” category in Appendix E of the rule. Dr. Jenkins moved and Dr. Simonton seconded that the staff determine whether the “all other uses” values are currently being used in permits, and if they are not then remove the “all other uses” values and that column from the Appendix E, and the motion carried unanimously 4 to 0.

Section 8.26. Selenium. – After discussion, Dr. Simonton moved and Mr. Armbricht seconded that the Board adopt the Safe Drinking Water Act Maximum Contaminate Level (MCL) of 50 ug/l for Category A and 4200 ug/l for Category C, and also to retain the current values for **Aquatic Life** of 20 ug/l for acute and 5 ug/l for chronic, and the motion carried unanimously 4 to 0.

Section 8.22. (Organics). Dioxin. After discussion, Dr. Simonton moved and Dr. Jenkins seconded that the Board adopt the USEPA recommended values for dioxin, which are 5.1E-9 for Category C and 5.0E-9 for Category A, and the motion carried unanimously 4 to 0.

Whereupon Dr. Simonton left the meeting.

Section 8.25. Radioactivity. After discussion, Mr. Armbrecht moved and Dr. Jenkins seconded that the Board adopt the drinking water MCLs for radionuclides (Beta particle and photon activity – 4 mrem; gross alpha particle activity – 15 pCi/L; combined radium 226 & 228 Radon – 300 pCi/L; uranium – 20 ug/L) for human health other than the Ohio River, and the motion carried unanimously 3 to 0.

Dr. Jenkins then moved and Mr. Armbrecht seconded that the Board remove the Aquatic Life values for radioactivity since the USEPA does not have values for radioactivity, and the motion carried unanimously 3 to 0.

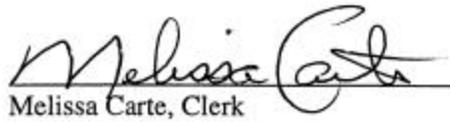
Section 8.25.1. Radionuclides – Ohio River. After discussion, Dr. Jenkins moved and Dr. Snyder seconded that the Board replace a portion of the language contained in this section with the ORSANCO language for the Ohio River main stem, and the motion carried unanimously 3 to 0. (The Board previously removed all the aquatic life values for radioactivity.)

Hexachlorocyclo-hexane-Technical. After discussion, Dr. Jenkins moved and Dr. Simonton seconded that the Board adopt this criteria which is a non-priority pollutant, with the USEPA values of 0.123 ug/l for Category A and 0.0414 ug/l for Category C.

Boron – After discussion, the Board members decided not to adopt this criterion during this triennial review.

Whereupon, Mr. Armbrecht moved and Dr. Jenkins seconded that the May 8, 2003, Environmental Quality Board meeting be adjourned and the motion carried unanimously 3 to 0.

I hereby certify that the forgoing is a true and correct record of the proceedings of the meeting held on May 8, 2003, by the West Virginia Environmental Quality Board. These minutes were approved by the Environmental Quality Board on June 19, 2003.



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

Melissa Carte, Clerk