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ADMINISTRATIVE LAW DIVISION

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OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF RULE MODIFICATION OF A PROPOSED RULE

AGENCY: Environmental Quality Board TITLE NUMBER: 46

CITE AUTHORITY W. Va. Code 22B-3-4

AMENDMENT TO AN EXISTING RULE: YES x NO ___

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 1

TITLE OF RULE BEING AMENDED: Requirements Governing Water Quality Standards

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: ___

TITLE OF RULE BEING PROPOSED: ___

THE ABOVE PROPOSED LEGISLATIVE RULE, FOLLOWING REVIEW BY THE LEGISLATIVE RULE MAKING REVIEW COMMITTEE IS HEREBY MODIFIED AS A RESULT OF REVIEW AND COMMENT BY THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE. THE ATTACHED MODIFICATIONS ARE FILED WITH THE SECRETARY OF STATE.

Frances E Hunter

Authorized Signature

14.60

GASTON CAPERTON
GOVERNOR

BUREAU OF ENVIRONMENT
10 McJUNKIN ROAD
NITRO, WV 25143-2506

DAVID C. CALLAGHAN
COMMISSIONER

January 12, 1995

Ms. Judy Cooper
Director, Administrative Law Division
Secretary of State's Office
Building 1, Suite 157K
Charleston, West Virginia 25305

RE: 46CSR1 - Requirements Governing
Water Quality Standards

Dear Ms. Cooper:

This is to advise you that I am giving approval for the filing of the above-captioned rule as a modification to a proposed rule with your Office and Legislative Rule-Making.

Your cooperation in this regard is very much appreciated. If you have any questions or require additional information, please feel free to contact Roger T. Hall at 759-0515.

Sincerely yours,

David C. Callaghan
Commissioner
Bureau of Environment

DCC;RTH:cc

Attachment

PROPOSED
LEGISLATIVE RULES
~~WATER RESOURCES BOARD~~
ENVIRONMENTAL QUALITY BOARD

SERIES 1
REQUIREMENTS GOVERNING WATER
QUALITY STANDARDS

§46-1-1. General.

1.1. Scope. -- These rules establish requirements governing the discharge or deposit of sewage, industrial wastes and other wastes into the waters of the State and establish water quality standards for the waters of the State standing or flowing over the surface of the State. It is declared to be the public policy of the State of West Virginia to maintain reasonable standards of purity and quality of the water of the State consistent with (1) public health and public enjoyment thereof; (2) the propagation and protection of animal, bird, fish, and other aquatic and plant life; and (3) the expansion of employment opportunities, maintenance and expansion of agriculture and the provision of a permanent foundation for healthy industrial development. (See W. Va. Code ~~§20-5A-1~~ 22-11-2)

1.2. Authority. -- W. Va. Code ~~§20-5A-3~~ 22B-3-4

1.3. Filing Date. -- ~~July 26, 1993~~

1.4. Effective Date. -- ~~August 25, 1993~~

~~1.5. Repeal of former rule. -- This legislative rule repeals West Virginia Administrative Regulations, State Water Resources Board, Chapter 20-5 and 5A, Series 1 (1991), "Requirements Governing Water Quality Standards", filed May 20, 1991.~~

§46-1-2. Definitions.

The following definitions in addition to those set forth in W. Va. Code ~~§20-5A-2~~ 22-11-3, shall apply to these rules unless otherwise specified herein, or unless the context in which used clearly requires a different meaning:

2.1. "Conventional treatment" is the treatment of water as approved by the State Health Department to assure that the water is safe for human consumption.

2.2. "Cumulative" means a pollutant which increases

in concentration in an organism by successive additions at different times or in different ways (bio-accumulation).

2.3. "Designated uses" are those uses specified in water quality standards for each water body or segment whether or not they are being attained. (See section 6.2)

2.4. "Existing uses" are those uses actually attained in a water body on or after November 28, 1975, whether or not they are included in the water quality standards.

2.~~3~~5. The "Federal Act" means the Clean Water Act (also known as the Federal Water Pollution Control Act) Public Law 92-500, as amended by Public Law 100-4, 33 U.S.C. 1251, et seq.

2.~~4~~6. "High quality waters" are those waters whose quality is equal to or better than the minimum levels necessary to achieve the national water quality goal uses. ~~Included are those streams or stream segments which receive annual stockings of trout but which do not support year-round trout populations.~~

2.~~5~~7. "Intermittent streams" are streams which have no flow during sustained periods of no precipitation and which do not support aquatic life whose life history requires residence in flowing waters for a continuous period of at least six (6) months.

2.~~6~~8. "Outstanding national resource waters" are those whose unique character, ecological or recreational value or pristine nature constitutes a valuable national or State resource. ~~(See section 7.3.)~~

2.~~7~~9. "Natural" or "naturally occurring" values or "natural temperature" shall mean for all of the waters of the State:

a. Those water quality values which exist unaffected by -- or unaffected as a consequence of -- any water use by any person; and

b. Those water quality values which exist unaffected by the discharge, or direct or indirect deposit of, any solid, liquid or gaseous substance by any person.

2.~~8~~10. "Non-point source" shall mean any source other than a point source from which pollutants may reach the waters of the State.

2.~~9~~11. "Persistent" shall mean a pollutant and its transformation products which under natural conditions degrade slowly in an aquatic environment.

2.1~~0~~2. "Point source" shall mean any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

2.1~~1~~3. "Representative important species of aquatic life" shall mean those species of aquatic life whose protection and propagation will assure the sustained presence of a balanced aquatic community. Such species are representative in the sense that maintenance of water quality criteria will assure both the natural completion of the species' life cycles and the overall protection and sustained propagation of the balanced aquatic community.

2.1~~2~~4. The "State Act" or "State Law" shall mean the West Virginia Water Pollution Control Act, W. Va. Code ~~§20-5a-1~~ 22-11-1.

2.1~~3~~5. "Total recoverable" refers to the digestion procedure for certain heavy metals as referenced in 40 CFR 136, as amended June 15, 1990, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act.

2.1~~4~~6. "Trout waters" are streams or stream segments which sustain year-round trout populations. Excluded are those streams or stream segments which receive annual stockings of trout but which do not support year-round trout populations.

2.1~~5~~7. "Water quality criteria" shall mean levels of parameters or stream conditions that are required to be maintained by these regulations. Criteria may be expressed as a constituent concentration, levels, or narrative statement, representing a quality of water that supports a designated use or uses.

2.1~~6~~8. "Water quality standards" means the combination of water uses to be protected and the water quality criteria to be maintained by these rules.

2.1~~7~~9. "Wetlands" ~~include such areas as swamps, marshes, bogs, and other land subject to frequent saturation or inundation, and which normally support a prevalence of vegetation typically found where wet soil conditions prevail.~~ are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar

areas.

2.~~18~~20. "Wet weather streams" are streams that flow only in direct response to precipitation or whose channels are at all times above the water table.

§46-1-3. Conditions Not Allowable In State Waters.

3.1. Certain characteristics of sewage, industrial wastes and other wastes cause pollution and are objectionable in all waters of the State. Therefore, the ~~State Water Resources~~ Environmental Quality Board does hereby proclaim that the following general conditions are not to be allowed in any of the waters of the State.

3.2. No sewage, industrial wastes or other wastes present in any of the waters of the State shall cause therein or materially contribute to any of the following conditions thereof:

a. Distinctly visible floating or settleable solids, suspended solids, scum, foam or oily slicks;

b. Deposits or sludge banks on the bottom;

c. Odors in the vicinity of the waters;

d. Taste or odor that would adversely affect the designated uses of the affected waters;

e. Materials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life;

f. Distinctly visible color;

g. Concentrations of bacteria which may impair or interfere with the designated uses of the affected waters;

h. Requiring an unreasonable degree of treatment for the production of potable water by modern water treatment processes as commonly employed; and

i. Any other condition, including radiological exposure, which adversely alters the integrity of the waters of the State including wetlands; no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.

§46-1-4. Anti-Degradation Policy.

4.1. It is the policy of the State of West Virginia ~~that instream water uses~~ the waters of the state shall be

maintained and protected as follows:

a. Existing ~~instream~~ water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. Existing uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included as designated uses within these water quality standards. ~~Waste assimilation and transport are not recognized as designated uses. The classification of the waters must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial and other purposes including navigation.~~

~~Subcategories of a use may be adopted and appropriate criteria set to reflect varying needs of such subcategories of uses, for example to differentiate between trout water and other waters. (See subsection d.)~~

~~b. At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under Sections 301 (b) and 306 of the Federal Clean Water Act and use of cost-effective and reasonable best management practices for non-point source control. Seasonal uses may be adopted as an alternative to reclassifying a water body or segment thereof to uses requiring less stringent water quality criteria. If seasonal uses are adopted, water quality criteria will be adjusted to reflect the seasonal uses; however, such criteria shall not preclude the attainment and maintenance of a more protective use in another season. A designated use which is not an existing use may be removed, or subcategories of a use may be established if it can be demonstrated that attaining the designated use is not feasible because:~~

~~A. Application of effluent limitations for existing sources more stringent than those required pursuant to Section 301 (b) and Section 306 of the Federal Act in order to attain the existing designated use would result in substantial and widespread adverse economic and social impact; or~~

~~B. Naturally-occurring pollutant concentrations prevent the attainment of the use; or~~

~~C. Natural, ephemeral, intermittent or low flow conditions of water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges to enable uses to be met; or~~

~~D. Human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than~~

~~to leave in place; or~~

~~E. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or~~

~~F. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses.~~

~~c. The State shall take into consideration the quality of downstream waters and shall assure that its water quality standards provide for the attainment of the water quality standards of downstream waters.~~

~~d. In establishing a less restrictive use or uses, or subcategory of use or uses, and the water quality criteria based upon such uses, the Board shall follow the requirements for revision of water quality standards as required by W. Va. Code §20-5A-3 and Section 303 of the Federal Act and the regulations thereunder. Any revision of water quality standards shall be made with the concurrence of EPA. The Board's administrative procedural regulations for applying for less restrictive uses or criteria shall be followed.~~

~~e~~b. ~~With the exception of the provisions of Section 7.2.c of this series, t~~ The existing ~~trout and other~~ high quality waters of the State must be maintained at their existing high quality unless it is determined after ~~consultation with EPA and the Chief~~ satisfaction of the intergovernmental coordination of the State's continuing planning process and opportunity for public comment and hearing that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. If limited degradation is allowed, it shall not result in injury or interference with existing stream water uses or in violation of State or Federal water quality criteria that describe the base levels necessary to sustain the national water quality goal uses of protection and propagation of fish, shellfish and wildlife and recreating in and on the water.

~~f.~~ In addition, ~~T~~the Board and the chief shall assure that all new and existing point sources shall achieve the highest established statutory and regulatory requirements applicable to them and shall assure the achievement of cost-effective and reasonable best management practices for non-point source control.

A. High quality waters are those waters meeting

the definition at section 2.6 herein.

B. High quality waters include but are not limited to the following:

(a) Streams designated by the West Virginia Legislature under the West Virginia Natural Stream Preservation Act, pursuant to W. Va. Code Section 22-13-~~1~~5, and

(b) Streams listed in West Virginia High Quality Streams, Fifth Edition, prepared by the Wildlife Resources Division, Department of Natural Resources (1986).

(c) Streams or stream segments which receive annual stockings of trout but which do not support year-round trout populations.

c. In waters which constitute a water of special concern no activities which result in the reduction of ambient water quality shall be allowed. Waters of special concern include:

A. All Federally designated rivers under the "Wild and Scenic Rivers Act" Public Law 95-542 as amended, 16 U.S.C. 1271, et seq .

B. All naturally reproducing trout streams.

C. All streams and other bodies of water in State and National Forests and Recreation Areas.

D. National Rivers. "National Parks and Recreation Act of 1978." Public Law 95-625, as amended, 16 U.S.C.1, et seq.

~~c~~d. In all cases, waters which constitute an outstanding national resource ~~as designated in subsection 7.3.e~~ shall be maintained and protected and improved where necessary. Outstanding national resource waters include, but are not limited to, all streams and rivers within the boundaries of Wilderness Areas designated by The Wilderness Act (16 U.S.C. 1131 et seq.) within the State.

Additional waters may be nominated for inclusion in that category by any interested party or by the Board on its own initiative. To designate a nominated water as an outstanding national resource water, the Board shall follow the public notice and hearing provisions as provided in 46 C.S.R. 6.

e. All applicable requirements of Section 316 (a) of the Federal Act shall apply to modifications of the temperature water quality criteria provided for in these rules.

§46-1-5. Mixing Zones.

5.1. In the permit review and planning process or upon the request of a permit applicant or permittee, the chief may establish on a case-by-case basis an appropriate mixing zone.

~~5.2. The following criteria shall be applied to the establishment of mixing zones:~~

~~a. Mixing zones shall:~~

~~A. Be kept as small as practical in area and length;~~

~~B. Not be used for, or considered as, a substitute for waste treatment;~~

~~C. Provide for as rapid a mixing as practical;~~

~~D. Not prevent the free passage of aquatic species or include spawning or nursery areas;~~

~~E. Not overlap a public water supply intake;~~

~~F. Not cause or contribute to any of the conditions prohibited in Section 3; and~~

~~G. Not interfere with any designated water use category.~~

~~5.3. The boundaries of the mixing zone shall reflect:~~

~~a. Receiving water body characteristics such as:~~

~~A. Water quality,~~

~~B. Local meteorology,~~

~~C. Flow regime (including low-flow records),~~

~~D. Magnitude of water exchange at point of discharge,~~

~~E. Stratification phenomena,~~

~~F. Waste capacity of the receiving system including retention time,~~

~~G. Turbulence and speed of flow,~~

~~H. Morphology of the receiving system as related to plume behavior and biological phenomena,~~

~~I. Designated water use categories; and~~

~~b. Discharge characteristics such as:~~

~~A. Flow regime,~~

~~B. Volume,~~

~~C. Design,~~

~~D. Location,~~

~~E. Rate of mixing and dilution, and~~

~~F. Plume behavior and mass-emission rates of constituents including knowledge of their persistence, toxicity, and chemical or physical behavior with time.~~

~~5.4. Where the seven (7) day, ten (10) year return frequency is 5 cfs or less, no mixing zone may be established.~~

~~5.5. In order to facilitate a determination or assessment of a mixing zone pursuant to this section, the chief may require a permit applicant or permittee to submit such information as deemed necessary.~~

5.2 The following guidelines and conditions are applicable to all mixing zones:

a. The chief will assign, on a case-by-case basis, definable geometric limits for mixing zones for a discharge or a pollutant or pollutants within a discharge. Applicable limits shall include, but may not be limited to, the linear distances from the point of discharge, surface area involvement, volume of receiving water, and shall take into account other nearby mixing zones. Mixing zones shall take into account the mixing conditions in the receiving stream (i.e: whether complete or incomplete mixing conditions exist). Mixing zones will not be allowed until applicable limits are assigned by the chief in accordance with this section.

b. Concentrations of pollutants which exceed the acute criteria for protection of aquatic life set forth in Appendix E shall not exist at any point within an assigned mixing zone or in the discharge itself unless a zone of initial dilution is assigned. A zone of initial dilution may be assigned on a case-by-case basis at the discretion of the chief. The zone of initial dilution is the area within the mixing zone where initial dilution of the effluent with the receiving water occurs, and

where the concentration of the effluent will be its greatest in the water column. Where a zone of initial dilution is assigned by the Chief, the size of the zone shall be determined using one of the four alternatives outlined in Section 4.3.3 of EPAs Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001 PB91-127415, March 1991). Concentrations of pollutants shall not exceed the acute criteria at the edge of the assigned zone of initial dilution. Chronic criteria for the protection of aquatic life and criteria for the protection of human health from the consumption of fish tissue may be exceeded within the mixing zone but shall be met at the edge of the assigned mixing zone.

c. Mixing zones, including zones of initial dilution, shall not interfere with fish spawning or nursery areas or fish migration routes; shall not overlap public water supply intakes or bathing areas; cause lethality to or preclude the free passage of fish or other aquatic life; nor harm any endangered species.

d. The mixing zone shall not exceed one-third (1/3) of the width of the receiving stream, and in no case shall the mixing zone exceed one-half (1/2) of the cross-sectional area of the receiving stream.

e. In lakes and other surface impoundments, the volume of a mixing zone shall not affect in excess of ten (10) percent of the volume of that portion of the receiving waters available for mixing.

f. A mixing zone shall be limited to an area or volume which will not adversely alter the existing or designated uses of the receiving water, nor be so large as to adversely affect the integrity of the water body.

g. Mixing zones shall not:

A. Be used for, or considered as, a substitute for technology-based requirements of the Clean Water Act and other applicable State and Federal laws.

B. Extend downstream at any time a distance more than five times the width of the receiving watercourse at the point of discharge.

C. Cause or contribute to any of the conditions prohibited in Section 46-1-3.

D. Be granted where instream waste concentration of a discharge is greater than 80%.

E. Overlap one another.

h) In the case of thermal discharges, a successful demonstration conducted under Section 316(a) of the Clean Water Act shall constitute compliance with all provisions of this section.

i) The Chief may waive the requirements of subsections (d) and (g)(B) above if a discharger provides an acceptable demonstration of:

A. Information defining the actual boundaries of the mixing zone in question; and

B. Information and data proving no violation of subsection (c) and (f) above by the mixing zone in question.

j. Upon implementation of a mixing zone in a permit, the permittee shall provide documentation that demonstrates to the satisfaction of the Chief that the mixing zone is in compliance with the provisions outlined in subsections (b), (d) and (g)(B).

k. In order to facilitate a determination or assessment of a mixing zone pursuant to this section, the chief may require a permit applicant or permittee to submit such information as deemed necessary.

§46-1-6. Water Use Categories.

6.1. These rules establish general Water Use Categories and Water Quality Standards for the waters of the State. Unless otherwise designated by these rules, at a minimum all waters of the State are designated for the Propagation and maintenance of Fish and Other Aquatic Life (Category B) and for Water Contact Recreation (Category C) consistent with Clean Water Act goals. Incidental utilization for whatever purpose may or may not constitute a justification for assignment of a water use category to a particular stream segment.

a. Waste assimilation and transport are not recognized as designated uses. The classification of the waters must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial and other purposes including navigation. Subcategories of a use may be adopted and appropriate criteria set to reflect varying needs of such subcategories of uses, for example to differentiate between trout water and other waters. (See subsection 4.1.d.)

b. At a minimum, uses are deemed attainable if

they can be achieved by the imposition of effluent limits required under Sections 301 (b) and 306 of the Federal Clean Water Act and use of cost-effective and reasonable best management practices for non-point source control. Seasonal uses may be adopted as an alternative to reclassifying a water body or segment thereof to uses requiring less stringent water quality criteria. If seasonal uses are adopted, water quality criteria will be adjusted to reflect the seasonal uses; however, such criteria shall not preclude the attainment and maintenance of a more protective use in another season. A designated use which is not an existing use may be removed, or subcategories of a use may be established if it can be demonstrated that attaining the designated use is not feasible because:

A. Application of effluent limitations for existing sources more stringent than those required pursuant to Section 301 (b) and Section 306 of the Federal Act in order to attain the existing designated use would result in substantial and widespread adverse economic and social impact; or

B. Naturally-occurring pollutant concentrations prevent the attainment of the use; or

C. Natural, ephemeral, intermittent or low flow conditions of water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges to enable uses to be met; or

D. Human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

E. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

F. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses.

c. The State shall take into consideration the quality of downstream waters and shall assure that its water quality standards provide for the attainment of the water quality standards of downstream waters.

d. In establishing a less restrictive use or

uses, or subcategory of use or uses, and the water quality criteria based upon such uses, the Board shall follow the requirements for revision of water quality standards as required by W. Va. Code ~~§20-5A-3~~ 22B-3-4 and Section 303 of the Federal Act and the regulations thereunder. Any revision of water quality standards shall be made with the concurrence of EPA. The Board's administrative procedural regulations for applying for less restrictive uses or criteria shall be followed.

6.2. Category A -- Water Supply, Public. -- This category is used to describe waters which, after conventional treatment, are used for human consumption. This category includes:

a. All community domestic water supply systems;

b. All non-community domestic water supply systems, (i.e. hospitals, schools, etc.);

c. All private domestic water systems;

d. All other surface water intakes where the water is used for human consumption; and

e. Shall apply to the stream segment extending upstream from the intake for a distance as defined in subsection 7.2.a.B of this series. (See Appendix B for partial listing)

6.3. Category B -- Propagation and maintenance of fish and other aquatic life. -- This category includes:

a. Category B1 -- Warm water fishery streams. -- Streams or stream segments which contain a fish population composed overwhelmingly of warm water species. (These are primarily sport fisheries and may be stocked with trout seasonally.)

b. Category B2 -- Trout Waters. -- As defined in Section 2.14~~6~~ (See Appendix A for a representative list.)

c. Category B3 -- Small non-fishable streams. -- Streams or stream segments which because of their size or flow patterns do not offer sport fishing; they generally contain ~~only~~ populations of minnows, darters, aquatic invertebrates, etc.

d. Category B4 -- Wetlands. -- As defined in section 2.17; certain numeric stream criteria may not be appropriate for application to wetlands (see Appendix E).

6.4. Category C -- Water contact recreation. -- This category includes swimming, fishing, water skiing and certain types of pleasure boating such as sailing in very small

craft and outboard motor boats. See Appendix D for a representative list of category C waters.

6.5. Category D. -- Agriculture and wildlife uses.

a. Category D1 -- Irrigation. -- This category includes all stream segments used for irrigation.

b. Category D2 -- Livestock watering. -- This category includes all stream segments used for livestock watering.

c. Category D3 -- Wildlife. -- This category includes all stream segments and wetlands used by wildlife.

6.6. Category E -- Water supply industrial, water transport, cooling and power. -- This category includes cooling water, industrial water supply, power production, commercial and pleasure vessel activity, except those small craft included in Category C.

a. Category E1 -- Water Transport. -- This category includes all stream segments modified for water transport and having permanently maintained navigation aides.

b. Category E2 -- Cooling Water. -- This category includes all stream segments having one (1) or more users for industrial cooling.

c. Category E3 -- Power production. -- This category includes all stream segments extending from a point 500 feet upstream from the intake to a point one half (1/2) mile below the wastewater discharge point. (See Appendix C for representative list)

d. Category E4 -- Industrial. -- This category is used to describe all stream segments with one (1) or more industrial users. It does not include water for cooling.

§46-1-7. West Virginia Waters.

7.1. Major River Basins and their Alphanumeric System. All streams and their tributaries in West Virginia shall be individually identified using an alphanumeric system as identified in the "Key to West Virginia Stream Systems and Major Tributaries" (1956) as published by the Conservation Commission of West Virginia and revised by the West Virginia Department of Natural Resources, Division of Wildlife (1985).

a. J - James River Basin. All tributaries to the West Virginia - Virginia State line.

b. P - Potomac River Basin. All tributaries of the main stem of the Potomac River to the West Virginia - Maryland - Virginia State line to the confluence of the North Branch and the South Branch of the Potomac River and all tributaries arising in West Virginia excluding the major tributaries hereinafter designated:

A. S - Shenandoah River and all its tributaries arising in West Virginia to the West Virginia - Virginia State line.

B. PC - Cacapon River and all its tributaries.

C. PSB - South Branch and all its tributaries.

D. PNB - North Branch and all tributaries to the North Branch arising in West Virginia.

c. M - Monongahela River Basin. The Monongahela River Basin main stem and all its tributaries excluding the following major tributaries which are designated as follows:

A. MC - Cheat River and all its tributaries except those listed below:

(a) MCB - Blackwater River and all its tributaries.

B. MW - West Fork River and all its tributaries.

C. MT - Tygart River and all its tributaries except those listed below:

(a) MTB - Buckhannon River and all its tributaries.

(b) MTM - Middle Fork River and all its tributaries.

D. MY - Youghigheny River and all its tributaries to the West Virginia - Maryland State line.

d. O Zone 1 - Ohio River - Main Stem. The main stem of the Ohio River from the Ohio - Pennsylvania - West Virginia State line to the Ohio - Kentucky - West Virginia State line.

e. O Zone 2 - Ohio River - Tributaries. All

tributaries of the Ohio River excluding the following major tributaries:

A. LK - Little Kanawha River. The Little Kanawha River and all its tributaries excluding the following major tributary which is designated as follows:

(a) LKH - Hughes River and all its tributaries.

B. K - Kanawha River Zone 1. The main stem of the Kanawha River from mile point 0, at its confluence with the Ohio River, to mile point 72 near Diamond, West Virginia.

C. K - Kanawha River Zone 2. The main stem of the Kanawha River from mile point 72 near Diamond, West Virginia and all its tributaries from mile point 0 to the headwaters excluding the following major tributaries which are designated as follows:

(a) KP - Pocatalico River and all its tributaries.

(b) KC - Coal River and all its tributaries.

(c) KE - Elk River and all its tributaries.

(d) KG - Gauley River. The Gauley River and all its tributaries excluding the following major tributaries which are designated as follows:

(A) KG-19 - Meadow River and all its tributaries.

(B) KG-34 - Cherry River and all its tributaries.

(C) KGC - Cranberry River and all its tributaries.

(D) KGW - Williams River and all its tributaries.

(e) KN - New River. The New River from its confluence with the Gauley River to the Virginia - West Virginia State line and all tributaries excluding the following major tributaries which are designated as follows:

(A) KNG - Greenbrier River and all its tributaries.

(B) KNB - Bluestone River and all its tributaries.

(C) KN-60 - East River and all its tributaries.

(D) K(L)-81-(1) - Bluestone Lake.

D. OG - Guyandotte River. The Guyandotte River and all its tributaries excluding the following major tributary which is designated as follows:

(a) OGM - Mud River and all its tributaries.

E. BS - Big Sandy River. The Big Sandy River to the Kentucky - Virginia - West Virginia State lines and all its tributaries arising in West Virginia excluding the following major tributary which is designated as follows:

(a) BST - Tug Fork and all its tributaries.

7.2. Applicability of Water Quality Standards. The following shall apply at all times unless a specific exception is granted in this section:

a. Water Use Categories as described in Section 6.

A. Based on meeting those Section 6 definitions, tributaries or stream segments may be classified for one or more Water Use Categories. When more than one use exists, they shall be protected by criteria for the use category requiring the most stringent protection.

B. Each segment extending upstream from the intake of a water supply public (Water Use Category A), for a distance of five (5) miles or to the headwater, must be protected by prohibiting the discharge of any pollutants in excess of the concentrations designated for this Water Use Category in Section 8. Provided, however, that within a zone extending one half (1/2) mile above the intake, the Chief, Water Resources Section, Division of Natural Resources, may establish for any discharge, effluent limitations for the protection of human health that require additional removal of those pollutants. (If a watershed is not significantly larger than either of the two (2) zones above the intake, the water supply section may include the entire upstream watershed to its headwaters.

b. In the absence of any special application or contrary provision, water quality standards shall apply at all times when flows are equal to or greater than the minimum mean seven (7) consecutive day drought flow with a ten (10) year return frequency (7Q10). NOTE: Exceptions do not apply to trout waters nor the requirements of Section 3.

c. Exceptions: Numeric ~~W~~water quality standards shall not apply: (See section 7.2.d for site specific revisions)

A. When the flow is less than 7Q10;

B. In wet weather streams (or intermittent streams, when they are dry or have no measurable flow): Provided, That the existing and designated uses of downstream waters are not adversely affected;

C. In the zone of initial dilution of any mixing zones which are established pursuant to Section 5 of these rules;

D. Where lesser quality is due to natural conditions. In such cases the naturally occurring values shall be the applicable criteria.

d. Site-specific applicability of water use categories and water quality criteria - State-wide water quality standards shall apply except where site-specific ~~water quality standards~~ numeric criteria, variances or use removals have been ~~adopted for the State's waters as follows:~~ approved following application and hearing, as provided in 46 C.S.R. 6. (See §§ 8.3 and 8.4) The following are approved site-specific criteria, variances and use removals:

A. James River - (Reserved)

B. Potomac River

(a) Except for the unnamed tributary of the South Branch of Buzzard Run above and below Prather Pond shall not have Water Use Category A; therefore may contain fluoride not to exceed 2.0 mg/1.

(b) Except that a site-specific numeric criterion for aluminum, not to exceed 500 ug/1, shall apply to the section of Opequon Creek from Turkey Run to the Potomac River.

C. Shenandoah River - (Reserved)

D. Cacapon River - (Reserved)

E. South Branch - (Reserved)

F. North Branch

(a) Except that the Stony River downstream from the limit of the thermal mixing zone (as established by Board Order of 11/20/75) for the Mount Storm Lake wastewater treatment facility to its confluence with the North Branch of the Potomac River is exempt from the 5°F above natural temperature rise; however, the maximum temperature outside the mixing zone shall not exceed 87°F at any time during the months of May through November and not exceed 73°F at any time during the months of December through April.

G. Monongahela River

(a) Except that flow in the main stem of the Monongahela River, as regulated by the Tygart Reservoir, operated by the U. S. Army Corps of Engineers, is based on a minimum flow of 345 cfs at Lock and Dam No. 8, river mile point 90.8. This exception does not apply to tributaries of the Monongahela River.

(b) Except that site-specific numeric criteria shall apply to ~~for~~ an unnamed tributary to the Monongahela River mainstem at approximately 3700 feet upstream of mile point 125, which may contain suspended solids not to exceed 60 mg/1, oil and grease not to exceed 15 mg/1, Ammonia-Nitrogen not to exceed 30 mg/1, total phenols not to exceed .10 mg/1, total cyanide not to exceed .05 mg/1, total manganese not to exceed 4 mg/1, total zinc not to exceed 1.5 mg/1, total copper not to exceed 1.0 mg/1, Benzene not to exceed .05 mg/1, Napthalene not to exceed .05 mg/1 and Benzo (a) Pyrene not to exceed .05 mg/1 and iron not to exceed 4 mg/1 for the months June through November and 7 mg/1 for the months of December through May.

H. Cheat River - (Reserved)

I. Blackwater River - (Reserved)

J. West Fork River - (Reserved)

K. Tygart River - (Reserved)

L. Buckhannon River - (Reserved)

M. Middle Fork River - (Reserved)

N. Youghiogheny River

(a) Water Use Categories A and E are

excluded from the tributaries of the Youghiogheny River in West Virginia which flow into Maryland.

O. Ohio River Main Stem - (Reserved)

P. Ohio River Tributaries.

(a) Except that site-specific numeric criteria shall apply to the stretch of Conners Run (0-77-A), a tributary of Fish Creek, from its mouth to the discharge from Conner Run impoundment, which shall not have the Water Use Category A and may contain arsenic not to exceed 200 ug/1; selenium not to exceed 62 ug/1; and iron not to exceed 3.5 mg/1 as a monthly average and 7 mg/1 as a daily maximum.

(b) Except that site-specific numeric criteria shall apply to ~~for~~ that segment of Harmon Creek (0-97) from its confluence with the Ohio River to a point 2.2 miles upstream, which shall not have the Water Use Category A designation. Therefore, at any time the temperature shall not exceed 100°F, total iron shall not exceed 4.0 mg/1 and total fluoride shall not exceed 2.0 mg/1, each as thirty (30) day average values to be determined from four (4) weekly samples.

(c) Except in the stretch of Cow Creek (0-55) from its mouth to a point approximately 2,300 feet upstream, the Water Use Category A shall not apply.

Q. Little Kanawha River. - (Reserved)

R. Hughes River - (Reserved)

S. Kanawha River Zone 1 - Main Stem

(a) For the Kanawha River main stem, Zone 1, Water Use Category A shall not apply; and

(b) The minimum flow shall be 1,960 cfs at the Charleston gauge.

T. Kanawha River Zone 2 and Tributaries.

(a) For the main stem of the Kanawha River only, the minimum flow shall be 1,896 cfs at mile point 72.

(b) Except the stretch between the mouth of Little Scary Creek (K-31) and the Little Scary impoundment shall not have Water Use Category A or B1 and shall have Water Use Category B3.~~; therefore may contain~~ The following site-specific numeric criterion shall apply to that section: arsenic not to exceed 200 ug/1 and selenium not to exceed 62 ug/1; and copper not to exceed

105 ug/1 as a daily maximum nor 49 ug/1 as a 4-day average.

(c) Except for Ward Hollow (K-39-A), a small tributary of Davis Creek which may contain chlorides not to exceed 540 mg/1.

(d) Except for Simmons Creek (K-54) from its mouth to a point 1200 feet upstream to which the following site-specific numeric criterion shall ~~have~~ apply: a maximum daily temperature not to exceed 38°C (100°F) nor a monthly average temperature to exceed 34°C.

U. Pocatalico River - (Reserved)

V. Coal River - (Reserved)

W. Elk River - (Reserved)

X. Gauley River - (Reserved)

Y. Meadow River - (Reserved)

Z. Cherry River - (Reserved)

AA. Cranberry River - (Reserved)

BB. Williams River - (Reserved)

CC. New River

(a) Except the stretch of Laurel Creek (KN-5), a tributary of the New River, from the confluence of Dempsey Branch and Laurel Creek to a point 1.7 miles below, where the site-specific numeric criterion for iron shall be 2.0 mg/1 total iron, and from that point to the confluence of Laurel Creek and the New River, the site-specific numeric criterion for iron shall be 1.0 mg/1 total iron.

DD. Greenbrier River

(a) Water Use Category A and B2 shall not apply to that segment of the East Fork of the Greenbrier River (KNG-78) from the reservoir located at the tannery to the confluence with the West Fork; Provided that all trout water (B2) standards shall not be violated in the mainstem Greenbrier River.

EE. Bluestone River - (Reserved)

FF. Bluestone Lake

(a) Category E Water Uses are deleted in

Bluestone Lake and temperature rise shall be limited to no more than 3°F above natural not to exceed 81°F at any time during the months of May through November and not to exceed 73°F at any time during December through April.

GG. East River - (Reserved)

HH. Guyandotte River - (Reserved)

II. Mud River - (Reserved)

JJ. Big Sandy River - (Reserved)

KK. Tug Fork River - (Reserved)

~~7.3. Classified waters of the State.~~

~~a. High quality waters. High quality waters shall include but are not limited to all waters defined in Section 2.4.~~

~~b. All streams designated by the West Virginia Legislature under the West Virginia Natural Stream Preservation Act, pursuant to W. Va. Code §20-5B-1.~~

~~c. West Virginia High Quality Streams Fifth Edition, prepared by the Wildlife Resources Division, Department of Natural Resources (1986).~~

~~d. National Resource Waters. National Resource Waters include, but are not limited to, the following waters of the State:~~

~~A. All Federally designated rivers under the "Wild and Scenic Rivers Act", Public Law 95-542, as amended, 16 U.S.C. 1271, et seq.~~

~~e. National Rivers. "National Parks and Recreation Act of 1978." Public Law 95-625, as amended, 16 U.S.C. 1, et seq.~~

§46-1-8. Specific Water Quality Criteria.

8.1. Charts of specific water quality criteria are included in Appendix E.

a. Specific state (i.e. total, total recoverable, valence, etc.) of any parameter to be analyzed shall follow 40 CFR 136, Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act, as amended, June 15, 1990. (See also Series II, Section 7.3 of these regulations)

b. An "X" or numerical value in the use columns of Appendix E shall represent the applicable criteria.

c. Charts of water quality criteria in Appendix E shall be applied in accordance with major stream and use applications, Sections 6 and 7.

8.2. Criteria for Toxicants.

a. Toxicants which are carcinogenic have human health criteria (Water Use Categor~~y~~ies A and C) based upon an estimated risk level of one additional cancer ~~death~~ case per one million persons (10^{-6}) and are indicated in Appendix E ~~by an asterisk (*)~~ with an endnote ([b]).

~~b. For Water Use Category B, the criteria for organic carcinogens are for the protection against accumulation of those carcinogens in fish flesh in excess of the amount that would produce a cancer risk level of one in one million (10^{-6}) humans.~~

c. A final determination on the critical design flow for carcinogens is not made in this rule, in order to permit further review and study of that issue. Following the conclusion of such review and study, the Legislature may again take up the authorization of this rule for purposes of addressing the critical design flow for carcinogens: Provided, That until such time as the review and study of the issue is concluded or until such time as the Legislature may again take up the authorization of this rule, the regulatory requirements for determining effluent limits for carcinogens shall remain as they were on the date this rule was proposed.

8.3. Variances from Specific Water Quality Criteria

a. A variance from numeric criteria may be granted to a discharger if it can be demonstrated that the conditions outlined in subsections 6.1.b.A - F limit the attainment of one or more specific water quality criteria. Variances shall apply only to the discharger to whom they are granted and shall be reviewed by the Board at least every three years. In granting a variance, the requirements for revision of water quality standards in 46 CSR Series 6 shall be followed.

8.4. Site-specific numeric criteria. The Board may establish numeric criteria different from those set forth in Appendix E for a stream or stream segment upon a demonstration that existing numeric criteria are either over-protective or under-protective of the aquatic life residing in the stream or stream segment. A site-specific numeric criterion will be established only where the numeric criterion will be fully protective of the aquatic life and the existing and designated

uses in the stream or stream segment. The site-specific numeric criterion may be established by conducting a Water Effects Ratio study pursuant to the procedures outlined in EPAs "Interim Guidance on the Determination and Use of Water-Effect Ratios for Metals" (February 1994); other methods may be used with prior approval by the Board. In adopting site-specific numeric criteria, the requirements for revision of water quality standards set forth in 46 CSR 6 shall be followed.

§46-1-9. Establishment Of Safe Concentration Values.

When a specific water quality standard has not been established by these rules and there is a discharge or proposed discharge into waters of the State, the use of which has been designated a Category B1 ~~and~~, B2, B3 or B4, such discharge may be regulated by the chief where necessary to protect State water through
establishment of a safe concentration value as follows:

9.1. Establishment of a safe concentration value shall be based upon data obtained from relevant aquatic field studies, standard bioassay test data which exists in substantial available scientific literature, or data obtained from specific tests utilizing one (1) or more representative important species of aquatic life designated on a case-by-case basis by the chief and conducted in a water environment which is equal to or closely approximates that of the natural quality of the receiving waters.

9.2. In those cases where it has been determined that there is insufficient available data to establish a safe concentration value for a pollutant, the safe concentration value shall be determined by applying the appropriate application factor as set forth below to the 96-hour LC 50 value. Except where the chief determines, based upon substantial available scientific data that an alternate application factor exists for a pollutant, the following appropriate application factors shall be used in the determination of safe concentration values:

a. Concentrations of pollutants or combinations of pollutants that are not persistent and not cumulative shall not exceed 0.10 (1/10) of the 96-hour LC 50.

b. Concentrations of pollutants or combinations of pollutants that are persistent or cumulative shall not exceed 0.01 (1/100) of the 96-hour LC 50.

9.3. Persons seeking issuance of a permit pursuant to these rules authorizing the discharge of a pollutant for which a safe concentration value is to be established using special bioassay tests pursuant to subsection 9.1 of this section shall perform such testing as approved by the chief and shall

submit all of the following in writing to the chief:

a. A plan proposing the bioassay testing to be performed.

b. Such periodic progress reports of the testing as may be required by the chief.

c. A report of the completed results of such testing including, but not limited to, all data obtained during the course of testing, and all calculations made in the recording, collection, interpretation and evaluation of such data.

9.4. Bioassay testing shall be conducted in accordance with methodologies outlined in the following documents: ~~EPA Ecological Research Series Publication, Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (600/4-85/013) 3rd Edition, March 1985)~~ U.S. EPA Office of Research and Development Series Publication, Methods for Measuring the Acute Toxicity (EPA/600/4-90/027F, August 1993, 4th Edition) or Short Term Methods for Estimating Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/600/4-89/001), March 1989; Standard Methods for the Examination of Water and Wastewater (~~17th~~ 18th Edition); or ASTM Practice E 729-88 for Conducting Acute Toxicity Tests with Fishes, Macroinvertebrates and Amphibians as published in Volume 11.04 of the 1988 Annual Book of ASTM Standards. Test waters shall be reconstituted according to recommendations and methodologies specified in the previously cited references or methodologies approved in writing by the chief.

APPENDIX A
CATEGORY B-2-TROUT WATERS

This list contains known trout waters and is not intended to exclude any waters which meet the definition in Section 2.~~17~~ 6.

River Basin	County	Stream
James River		
J	Monroe	South Fork Potts Creek
Potomac River		
P	Jefferson	Town Run
P	"	Rocky Marsh Run
P	Berkeley	Opequon Creek
P	"	Tuscarora Creek (Above Martinsburg)
P	"	Middle Creek (Above Route 30 Bridge)
P	"	Mill Creek
P	"	Hartland Run
P	"	Mill Run
P	"	Tillance Creek
P	Morgan	Meadow Branch
PS	Jefferson	Flowing Springs Run (Above Halltown)
PS	"	Cattail Run
PS	"	Evitt's Run
PS	"	Big Bullskin Run
PS	"	Long Marsh Run
PC	Hampshire	Cold Stream
PC	"	Edwards Run and Impoundment
PC	"	Dillons Run
PC	Hardy	Lost River
PC	"	Camp Branch
PC	"	Lower Cove Run
PC	"	Moores Run
PC	"	North River (Above Rio)
PC	"	Waites Run
PC	"	Trout Run
PC	"	Trout Pond (Impoundment)
PC	"	Warden Lake (Impoundment)
PC	"	Rock Cliff Lake (Impoundment)
PSB	Hampshire	Mill Creek
PSB	"	Mill Run
PSB	Hardy	Dumpling Creek
PSB	Grant-Pendleton	North Fork South Branch
PSB	Grant	North Fork Lunice Creek
PSB	"	South Fork Lunice Creek
PSB	"	South Mill Creek (Above Hiser)
PSB	"	Spring Run
PSB	Pendleton	Hawes Run (Impoundment)
PSB	"	Little Fork
PSB	"	South Branch (Above North Fork)
PSB	"	Seneca Creek
PSB	"	Laurel Fork
PSB	"	Big Run
PNB	Mineral	North Fork Patterson Creek
PNB	"	Fork Ashby (Impoundment)
PNB	"	New Creek
PNB	"	New Creek Dam 14 (Impoundment)
PNB	"	Mill Creek (Above Markwood)

Monongahela River		
M	Monongalia-Marion	Whiteday Creek (Above Smithtown)
MC	Monongalia	Morgan Run
MC	"	Coopers Rock (Impoundment)
MC	"	Blaney Hollow
MC	Preston	Laurel Run
MC	"	Elsey Run
MC	"	Saltlick Creek
MC	"	Buffalo Creek
MC	"	Wolf Creek
MC	Tucker	Clover Run
MC	"	Elklick Run
MC	"	Horseshoe Run
MC	"	Maxwell Run
MC	"	Red Creek
MC	"	Slip Hill Mill Branch
MC	"	Thomas Park (Impoundment)
MC	"	Blackwater River (Above Davis)
MC	Randolph	Camp Five Run
MC	"	Dry Fork (Above Otter Creek)
MC	"	Glady Fork
MC	"	Laurel Fork
MC	"	Gandy Creek (Above Whitmer)
MC	"	East Fork Glady Fork (Above C & P Compressor Station)
MC	Randolph	Shavers Fork (Above Little Black Fork)
MC	"	Three Spring Run
MC	"	Spruce Knob Lake Impoundment)
MW	Harrison	Dog Run (Pond)
MW	Lewis	Stonecoal
MT	Barbour	Brushy Fork (Above Valley Furnace)
MT	"	Teter Creek Lake (Impoundment)
MT	"	Mill Run
MT	Taylor-Barbour	Tygart Lake Tailwaters (Above Route 119 Bridge)
MT	Preston	Roaring Creek (Above Little Lick Branch)
MT	Randolph	Tygart River (Above Huttonsville)
MT	"	Elkwater Fork
MT	"	Big Run
MTB	Upshur-Randolph Lewis	Right Fork Buckhannon River
MTB	Upshur	Buckhannon River (Above Beans Mill)
MTB	Upshur	French Creek
MTB	Upshur-Randolph	Left Fork Right Fork
MTM	Upshur	Right Fork Middle Fork River
MTM	Randolph	Middle Fork River (Above Cassity)
MY	Preston	Rhine Creek
Little Kanawha River		
LK	Upshur	Left Fork-Right Fork Little Kanawha River
LK	Upshur-Lewis	Little Kanawha River (Above Wildcat)
Kanawha River		
KE	Braxton	Sutton Reservoir
KE	"	Sutton Lake Tailwaters (Above Route 38/5 Bridge)
KE	Webster	Back Fork
KE	"	Desert Fork
KE	"	Fall Run
KE	"	Laurel Fork

KE	Webster	Left Fork Holly River
KE	"	Sugar Creek
KE	"	Elk River (Above Webster Springs)
KC	Raleigh	Stephens Lake (Impoundment)
KC	"	Marsh Fork (Above Sundial)
KG	Nicholas	Summersville Reservoir (Impoundment)
KG	"	Summersville Tailwaters (Above Collison Creek)
KG	"	Deer Creek
KG	Randolph-Webster	Gauley River (Above Moust Coal Tipple)
KG	Fayette	Glade Creek
KG	Nicholas	Hominy Creek
KG	"	Anglins Creek
KG	Greenbrier	Big Clear Creek
KG	"	Little Clear Creek and Laurel Run
KG	"	Meadow Creek
KG	Fayette	Wolf Creek
KG	Nicholas	Cherry River
KG	Greenbrier-Nicholas	Laurel Creek
KG	Greenbrier-Nicholas	North Fork Cherry River
KG	Greenbrier	Summit Lake (Impoundment)
KG	Greenbrier-Nicholas	South Fork Cherry River
KGC	Pocahontas-Webster-Nicholas	Cranberry River
KGC	Pocahontas	South Fork Cranberry River
KGW	Pocahontas	Tea Creek
KGW	Pocahontas-Webster	Williams River (Above Dyer)
KN	Raleigh	Glade Creek
KN	Summers	Meadow Creek
KN	Fayette	Mill Creek
KN	"	Laurel Creek (Above Cotton Hill)
KN	Raleigh	Pinch Creek
KN	Monroe	Rich Creek
KN	"	Turkey Creek
KN	Fayette	Dunloup Creek (Downstream from Harvey Sewage Treatment Plant)
KN	Mercer	East River (Above Kelleysville)
KN	"	Pigeon Creek
KN	Monroe	Laurel Creek
KNG	Monroe	Kitchen Creek (Above Gap Mills)
KNG	Greenbrier	Culverson Creek
KNG	"	Milligan Creek
KNG	Greenbrier-Monroe	Second Creek (Rt. 219 Bridge to Nickell's Mill)
KNG	Greenbrier	North Fork Anthony Creek
KNG	"	Spring Creek
KNG	"	Anthony Creek (Above Big Draft)
KNG	Pocahontas	Watoga Lake
KNG	"	Beaver Creek
KNG	"	Knapp's Creek
KNG	"	Hills Creek
KNG	"	North Fork Deer Creek (Above Route 28/5)
KNG	"	Deer Creek
KNG	"	Sitlington Creek
KNG	"	Stoney Creek
KNG	"	Swago Creek
KNG	"	Buffalo Fork (Impoundment)
KNG	"	Seneca (Impoundment)
KNG	"	Greenbrier River (Above Hosterman)
KNG	"	West Fork-Greenbrier River above the impoundment at the tannery
KNG	"	Little River-East Fork

KNG	"	Little River-West Fork
KNG	"	Five Mile Run
KNG	"	Mullenax Run
KNG	"	Abes Run
KNB	Mercer	Marsh Fork
KNB	"	Camp Creek
OG	Wyoming	Pinnacle Creek
BST	McDowell	Dry Fork (Above Canebrake)

APPENDIX B

CATEGORY A - WATER SUPPLY PUBLIC

This list contains known waters used as public water supplies and is not intended to exclude any waters as described in Section 6.2.

River Basin	County	Operating Company	Source
Shenandoah River			
S	Jefferson	Charlestown Water	Shenandoah River
Potomac River			
P	Jefferson	3-M Company	Turkey Run
P	"	Shepardstown Water	Potomac River
P	"	Harpers Ferry Water	Elk Run
P	Berkeley	DuPont Potomac River Works	Potomac River
P	"	Berkeley County PSD.	Le Feure Spring
P	"	Opequon PSD.	Quarry Spring
P	"	Hedgesville PSD.	Speck Spring
P	Morgan	Paw Paw Water	Potomac River
PSB	Hampshire	Romney Water	South Branch Potomac River
PSB	"	Peterkin Conference Center	Mill Run
PSB	Hardy	Moorefield Municipal Water	South Fork River
PSB	Pendleton	U.S. Naval Radio Sta.	South Fork River
PSB	"	Circleville Water Inc.	North Fork of South Branch, Potomac River
PSB	Grant	Moutain Top PSD	Mill Creek, Imp.
PSB	"	Petersburg Municipal Water	South Branch, Potomac River
PNB	Grant	Island Creek Coal	Impoundment
PNB	Mineral	Piedmont Municipal Water	Savage River, Maryland
PNB	"	Keyser Water	New Creek
PNB	"	Fort Ashby PSD.	Lake
Monongahela River			
M	Monongalia	Morgantown Water Comm.	Colburn Creek & Monongahela R.
M	"	Morgantown Ordinance Works	Monongahela R.
M	Preston	Preston County PSD	Deckers Creek
M	Monongalia	Blacksville # 1 Mine	Impoundment
M	"	Loveridge Mine	Impoundment
M	"	Consolidation Coal Co.	Impoundment
M	Preston	Mason Town Water	Block Run
MC	Preston	Fibair Inc.	Impoundment
MC	Monongalia	Cheat Neck PSD	Cheat Lake
MC	"	Lakeview Country Club	Cheat Lake - Lake Lynn
MC	"	Union District PSD	Cheat Lake - Lake Lynn
MC	"	Cooper's Rock State Park	Impoundment
MC	Preston	Kingwood Water	Cheat River
MC	"	Hopemount State Hospital	Snowy Creek
MC	"	Rowlesburg Water	Keyser Run & Cheat River
MC	"	Albright	Cheat River
MC	Tucker	Parsons Water	Shavers & Elk Lick Fork

APPENDIX B
CATEGORY A - WATER SUPPLY PUBLIC

This list contains known waters used as public water supplies and is not intended to exclude any waters as described in Section 6.2.

River Basin	County	Operating Company	Source
Shenandoah River			
S	Jefferson	Charlestown Water	Shenandoah River
Potomac River			
P	Jefferson	3-M Company	Turkey Run
P	"	Shepardstown Water	Potomac River
P	"	Harpers Ferry Water	Elk Run
P	Berkeley	DuPont Potomac River Works	Potomac River
P	"	Berkeley County PSD.	Le Feure Spring
P	"	Opequon PSD.	Quarry Spring
P	"	Hedgesville PSD.	Speck Spring
P	Morgan	Paw Paw Water	Potomac River
PSB	Hampshire	Romney Water	South Branch Potomac River
PSB	"	Peterkin Conference Center	Mill Run
PSB	Hardy	Moorefield Municipal Water	South Fork River
PSB	Pendleton	U.S. Naval Radio Sta.	South Fork River
PSB	"	Circleville Water Inc.	North Fork of South Branch, Potomac River
PSB	Grant	Moutain Top PSD	Mill Creek, Imp.
PSB	"	Petersburg Municipal Water	South Branch, Potomac River
PNB	Grant	Island Creek Coal	Impoundment
PNB	Mineral	Piedmont Municipal Water	Savage River, Maryland
PNB	"	Keyser Water	New Creek
PNB	"	Fort Ashby PSD.	Lake
Monongahela River			
M	Monongalia	Morgantown Water Comm.	Colburn Creek & Monongahela R.
M	"	Morgantown Ordinance Works	Monongahela R.
M	Preston	Preston County PSD	Deckers Creek
M	Monongalia	Blacksville # 1 Mine	Impoundment
M	"	Loveridge Mine	Impoundment
M	"	Consolidation Coal Co.	Impoundment
M	Preston	Mason Town Water	Block Run
MC	Preston	Fibair Inc.	Impoundment
MC	Monongalia	Cheat Neck PSD	Cheat Lake
MC	"	Lakeview Country Club	Cheat Lake - Lake Lynn
MC	"	Union District PSD	Cheat Lake - Lake Lynn
MC	"	Cooper's Rock State Park	Impoundment
MC	Preston	Kingwood Water	Cheat River
MC	"	Hopemount State Hospital	Snowy Creek
MC	"	Rowlesburg Water	Keyser Run & Cheat River
MC	"	Albright	Cheat River
MC	Tucker	Parsons Water	Shavers & Elk Lick Fork
MC	"	Thomas Municipal	Thomas Reservoir

	MC	"	Thomas Municipal	Thomas Reservoir
	MC	"	Hamrick PSD	Dry Fork
	MC	"	Douglas Water System	Long Run
	MC	"	Davis Water	Blackwater River
	MC	"	Hambleton Water System	Roaring Creek
	MC	"	Canaan Valley State Park	Blackwater River
	MC	Pocahontas	Cheat Mt. Sewer	Shavers Lake
	MC	"	Snowshoe Co. Water	Shavers Fork
	MC	Randolph	Womelsdorf Water	Yokum Run
	MW	Harrison	Lumberport Water	Jones Run
	MW	"	Clarksburg Water Bd.	West Fork River
	MW	"	Bridgeport Mun. Water	Deecons & Hinkle Creek
	MW	"	Salem Water Bd.	Dog Run
	MW	"	West Milford Water	West Fork River
	MW	Lewis	W.V. Water - Weston District	West Fork River
	MW	"	Jackson's Mill Camp	Impoundment
	MW	"	West Fork River PSD	West Fork River
	MW	"	Kennedy Compressor Station	West Fork River
	MW	"	Jane Lew Water Comm.	Hackers Creek
	MW	Harrison	Bel-Meadow Country Club	Lake
	MW	"	Harrison Power Station	West Fork River
	MW	"	Oakdale Portal	Impoundment
	MW	"	Robinson Port	Impoundment
	MT	Marion	Fairmont Water Comm.	Tygart River
	MT	"	Mannington Water	Impoundment
	MT	"	Monongah Water Works	Tygart River
	MT	"	Easter Assoc. Coal Corp.	Impoundment
	MT	"	Four States Water	Impoundment
	MT	Harrison	Shinnston Water Dept.	Tygart River
	MT	Taylor	Grafton Water	Tygart River-Lake
	MT	Barbour	Phillippi Water	Tygart River
	MT	"	Bethlehem Mines Corp.	Impoundment
	MT	"	Belington Water Works	Tygart River & Mill Run Lake
	MT	Randolph	Elkins Muicipal Water	Tygart River
	MT	"	Beverly Water	Tygart River
	MT	"	Valley Water	Tygart River
	MT	"	Huttonsville Medium Security Prison	Tygart River
	MT	"	Mill Creek Water	Mill Creek
	MTB	Upshur	Buckhannon Water Board	Buckhannon River

Ohio River

O	Zone 1	Hancock	Chester Water & Sewer	Ohio River
O	" "	Brooke	City of Weirton	Ohio River
O	" "	"	Weirton Steel Division	Ohio River
O	" "	Ohio	Wheeling Water	Ohio River
O	" "	Tyler	Sistersville Mun. Water	Ohio River
O	" "	Pleasants	Pleasants Power Station	Ohio River
O	" "	Cabell	Huntington Water Corp.	Ohio River
O	" "	Marshall	Mobay Chemical Co.	Ohio River
O	" "	Wood	E. I. DuPont	Ohio River
O	Zone 2	Marshall	Cameron Water	Glass House Hollow
O	" "	"	New Crindahana Water System	Wheeling Creek
O	" "	Wetzel	Pine Grove Water	North Fork, Fishing Creek
O	" "	Marshall	Consolidated Coal Co.	Impoundment
O	" "	Tyler	Middlebourne Water	Middle Island Creek
O	" "	Doddridge	West Union Mun. Water	Middle Island Creek
O	" "	Mason	Hidden Valley Country	Lake/Impoundment
O	" "	Jackson	Ripley Water	Mill Creek
O	" "	Wayne	Wayne Municipal Water	Twelve Pole Creek
O	" "	"	East Lynn Lake	East Lynn Lake
O	" "	"	Monterey Coal Co.	Impoundment

Little Kanawha

LK	Wood	Claywood Park PSD	Little Kanawha River
LK	Calhoun	Grantsville Mun. Water	Little Kanawha River
LK	Gilmer	Glenville Utility	Little Kanawha River
LK	"	Consolidated Gas Compressor	Steer Creek
LK	Braxton	Burnsville Water Works	Little Kanawha River
LK	Roane	Spencer Water	Spring Creek & Mile Tree Reservoir
LK	Wirt	Elizabeth Water	Little Kanawha River
LKH	Ritchie	Cairo Water	North Fork Hughes R.
LKH	"	Harrisville Water	North Fork Hughes R.
LKH	"	Pennsboro Water	North Fork Hughes R.

Kanawha River

K	Putnam	Buffalo Water	Cross Creek
K	"	Winfield Water	Poplar Fork & Crooked Creek
K	"	South Putnam PSD	Poplar Fork & Crooked Creek
K	Kanawha	Cedar Grove Water	Kanawha River
K	"	Pratt Water	Kanawha River
K	Fayette	Armstrong PSD PO-KI-CO-EL	Kanawha River & Gum Hollow
K	"	Kanawha Water Co.- Beards Fork	Unnamed Tributary Kanawha River
K	Kanawha	Midland Trail School	Impoundment
K	"	Cedar Coal Co.	Impoundment
K	Fayette	Elkem Metals Co.	Kanawha River
K	"	Deepwater PSD	Kanawha River
K	"	Kanawha Falls PSD	Kanawha River
K	"	W.V. Water-Montgomery	Kanawha River

Pocatalico River

KP	Kanawha	Sissonville PSD	Pocatalico River
KP	Roane	Walton PSD	Silcott Fork Dam

Coal River

KC	Kanawha	St. Albans Water	Coal River
KC	"	Washington PSD	Coal River
KC	Lincoln	Lincoln PSD	Coal River
KC	Boone	Coal River PSD	Coal River
KC	"	Whitesville PSD	Coal River
KC	Raleigh	Armco Mine 10	Marsh Fork
KC	"	Armco Steel-Montc. Stickney	Coal River
KC	"	Peabody Coal	Coal River
KC	"	Stephens Lake Park	Lake Stephens
KC	Boone	W.V. Water-Madison Dist.	Little Coal River
KC	"	Van PSD	Pond Fork
KC	Raleigh	Consol. Coal Co.	Workmans Creek
KC	Boone	Water Ways Park	Coal River

Elk River

KE	Kanawha	Clendenin Water	Elk River
KE	"	W.V. Water-Kanawha Valley Dist.	Elk River
KE	Kanawha	Pinch PSD	Elk River
KE	Clay	Clay Waterworks	Elk River
KE	"	Procious PSD	Elk River
KE	Braxton	Flatwoods-Canoe Run PSD	Elk River
KE	"	Sugar Creek PSD	Elk River
KE	"	W.V. Water-Gassaway Dist.	Elk River
KE	"	W.V. Water-Sutton Dist.	Elk River
KE	Webster	W.V. Water-Webster Springs	Elk River
KE	"	Holly River State Park	Holly River

Gauley River

KG	Nicholas	Craigsville PSD	Gauley River
KG	"	Summersville Water	Impoundment/ Muddlety Creek
KG	"	Nettie-Leivasy PSD	Jim Branch
KG	Webster	Cowen PSD	Gauley River
KG	Nicholas	Wilderness PSD	Anglins Creek & Meadow River
KG	"	Richwood Water	North Fork Cherry R.

New River

KN	Fayette	Ames Heights Water	Mill Creek
KN	"	Mt. Hope Water	Impounded Mine (Surface)
KN	"	Ansted Municipal Water	Mill Creek
KN	"	Fayette Co. Park	Impoundment
KN	"	New River Gorge Campground	Impoundment
KN	"	Fayetteville Water	Wolfe Creek
KN	Raleigh	Beckley Water	Glade Creek
KN	"	Westmoreland Coal Co.	Farley Branch

Bluestone River

KNB	Summers	Jumping Branch-Nimitz	Mt. Valley Lake
KNB	"	Bluestone Conf. Center	Bluestone Lake
KNB	"	Pipestem State Park	Impoundment
KNB	Mercer	Town of Athens	Impoundment
KNB	"	Bluewell PSD	Impoundment
KNB	"	Bramwell Water	Impoundment
KNB	"	Green Valley-Glenwood PSD	Bailey Reservoir
KNB	"	Kelly's Tank	Spring
KNB	"	W.V. Water Princeton	Impoundment-Brush Creek
KNB	"	Lashmeet PSD	Impoundment
KNB	"	Pinnacle Water Assoc.	Mine
KNB	"	W.V. Water Bluefield	Impoundment

Greenbrier River

KNG	Summers	W.V. Water Hinton	Greenbrier River & New River
KNG	"	Big Bend PSD	Greenbrier River
KNG	Greenbrier	Alderson Water Dept.	Greenbrier River
KNG	"	Ronceverte Water	Greenbrier River
KNG	"	Lewisburg Water	Greenbrier River
KNG	Pocahontas	Denmar State Hospital Water	Greenbrier River
KNG	"	City of Marlinton Water	Knapp Creek
KNG	"	Cass Scenic Railroad	Leatherbark Creek
KNG	"	Upper Greenbrier PSD	Greenbrier River
KNG	"	The Hermitage	Greenbrier River

Guyandotte River

OG	Cabell	Salt Rock PSD	Guyandotte River
OG	Lincoln	West Hamlin Water	Guyandotte River
OG	Logan	Logan Water Board	Guyandotte River
OG	"	Man Water Works	Guyandotte River
OG	"	Buffalo Creek PSD	Buffalo Creek/ Mine/Wells
OG	"	Chapmanville	Guyandotte River
OG	"	Logan PSD	Whitman Creek/ Guyandotte River
OG	Mingo	Gilbert Water	Guyandotte River
OG	Wyoming	Oceana Water	Laurel Fork
OG	"	Glen Rogers PSD	Impoundment
OG	"	Pineville Water	Pinnacle Creek/Guyandotte River

OG	Raleigh	Raleigh Co. PSD-Amigo	Tommy Creek
OGM	Cabell	Milton Water Works	Guyandotte River
OGM	"	Culloden PSD	Indian Fork Creek
OGM	Putnam	Hurricane Municipal Water	Impoundment
OGM	"	Lake Washington PSD	Lake Washington

Big Sandy River

BS	Wayne	Kenova Muicipal Water	Big Sandy River
BS	"	Fort Gay Water	Tug Fork
BST	Mingo	Kermit Water	Tug Fork
BST	"	Matewan Water	Tug Fork
BST	"	A & H Coal Co., Inc.	Impoundment
BST	"	Williamson Water	Impoundment
BST	McDowell	City of Welch	Impoundment/Wells
BST	"	City of Gary	Impoundment/Mine

APPENDIX C

CATEGORY B-3 - POWER PRODUCTION

This list contains known power production facilities and is not intended to exclude any waters as described in Section 6.6.c.

River Basin	County	Station Name	Operating Company
Monongahela River			
M	Monongalia	Fort Martin Station	Monongahela Power
M	Marion	Rivesville Station	Monongahela Power
MC	Preston	Albright Station	Monongahela Power
MW	Harrison	Harrison Station	Monongahela Power
Potomac	Grant	Mt. Storm Power Station	Virginia Electric & Power Company
Ohio River			
O Zone 1	Wetzel	Hannibal(Hydro)	
O " "	Marshall	Kamer	Ohio Power
O " "	"	Mitchell	Ohio Power
O " "	Pleasants	Pleasants Station	Monongahela Power
O " "	"	Willow Island Station	Monongahela Power
O " "	Mason	Phillip Sporn Plant	Central Operating (AEP)
O " "	"	Racine (Hydro)	Ohio Power
O " "	"	Mountaineer	Appalachian Power Co.
K	Putnam	Winfield (Hydro)	Appalachian Power Co.
K	Kanawha	Marmet (Hydro)	Appalachian Power Co.
K	"	London (Hydro)	Appalachian Power Co.
K	"	Kanawha River	Appalachian Power Co.
K	"	John E. Amos	Appalachian Power Co.

APPENDIX D

CATEGORY C - WATER CONTACT RECREATION

This list contains waters known to be used for water contact recreation and is not intended to exclude any waters as described in Section 6.4.

River Basin	Stream Code	Stream	County
Shenandoah	S	Shenandoah River	Jefferson
Potomac	P	Potomac River	Jefferson
	P	" "	Hampshire
	P	" "	Berkeley
	P	" "	Morgan
	P-9	Sleepy Creek & Meadow Branch	Berkeley
	P-9-G-1	Noeth Fork of Indian Run	Morgan
South Branch	PSB	South Branch of Potomac River	Hampshire
	PSB	" "	Hardy
	PSB	" "	Grant
	PSB-21-X	Hawes Run	Pendleton
	PSB-25-C-2	Spring Run	Grant
	PSB-28	North Fork South Branch Potomac River	Grant
North Branch	PNB	North Branch of Potomac River	Mineral
	PNB-4-EE	North Fork Patterson Creek	Grant
	PNB-7-H	Linton Creek	Grant
	PNB-17	Stoney River-Mt. Storm Lake	Grant
	PC	Cacapon River	Hampshire
Monongahela			
Cheat	MC	Cheat Lake/Cheat River	Monongalia/Preston
	MC	Alpine Lake	Preston
	MC-6	Coopers Rock Lake/ Quarry Run	Monongalia
	MC-12	Big Sandy Creek	Preston
	MSC	Shavers Fork	Randolph
	MTN	Middle Fork River	Barbour/Randolph/ Upshur
	MW	West Fork River	Harrison
	MW-38	Stonecoal Creek/ Stonecoal Lake	Lewis
Ohio	O	Ohio River	Brooke/Cabell/ Hancock/Jackson/ Marshall/Mason/ Ohio/Pleasants/ Tyler/Wayne/Wood/ Wetzel
	O-2-H	Beech Fork of Twelvepole Creek/ Beech Fork Lake	Wayne
	O-2-Q	East Fork of Twelvepole Creek/ East Lynn Lake	Wayne

	O-3	Fourpole Creek	Cabell
	O-21	Old Town Creek/ McClintic Ponds	Mason
	OMi	Middle Island Creek/ Crystal Lake	Doddridge
	OG	Guyandotte River	Cabell
	OG	Guyandotte River/ R D Bailey Lake	Wyoming
	OGM	Mud River	Cabell
Little Kanawha	LK	Little Kanawha River/ Burnsville Lake	Braxton
Kanawha	K	Kanawha River	Fayette/Kanawha/ Mason/Putnam
	K-1	Unnamed Tributary Krodel Lake	Mason
	KC	Coal River	Kanawha
	KC-46-Q	Stephens Branch/ Lake Stephens	Raleigh
	KE	Elk River	Kanawha/Clay/ Braxton/Webster/ Randolph
	KE	Sutton Lake	Braxton
	KN	New River	Fayete/Raleigh/ Summers
	KN-26-F	Little Beaver Creek	Raleigh
	KNG	Greenbrier River	Greenbrier/Pocahontas/ Summers
	KNG-23-E-1	Little Devil Creek/ Moncove Lake	Monroe
	KNG-28	Anthony Creek	Greenbrier
	KNG-28-P	Meadow Creek/ Lake Sherwood	Greenbrier
	KNB	Bluestone River/ Bluestone Lake	Summers
	KNB	North Fork Brush Creek	Mercer
	KG	Gauley River	Webster
	KG	Gauley River/ Summersville Lake	Nicholas
	KGW	Williams River	Webster

APPENDIX E

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.1 Aluminum (ug/l) Not to exceed: (See 7.1.d.B(b))	750	~~748~~ 87	750	87			
8.2 Ammonia (ug/l): Un-ionized ammonia (UA) shall be determined from values of total ammonia-N, pH and temperature according to the following equation: $UA = \frac{1.2(\text{total ammonia-N})}{1+10^{(pka-pH)}}$ where pka = 0.0902 + 2730/(273.2 + T and T = temperature (°C) The concentration of un-ionized ammonia (NH3) shall not exceed 50 ug/l. ~~The concentration of un-ionized ammonia shall not exceed 20 ug/l.~~		~~50~~		~~20~~		50	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.2.1 Acute and chronic aquatic life criteria for ammonia shall be determined using the tables and formulae in the National Criteria section of USEPAs Ambient Water Quality Criteria for Ammonia - 1984 (EPA 440/5-85-001, January 1985)	X	X	X	X			
8.3 Antimony (ug/l) Not to exceed:					4300	14	
8.4 Arsenic[b] (ug/l) Not to exceed:					50	50	100
8.4.1 Trivalent Arsenic Not to exceed:	360	190	360	190	~~190~~		
8.5 Barium (mg/l) Not to exceed:						1.0	
8.6 Beryllium[b] (~~ng~~ug/l)		130		130		~~7.7~~ .0077	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.7 Cadmium (ug/l) Hardness (mg/l $CaCO_3$) Soluble Cd 0 - 35 1.0 36 - 75 2.0 76 - 150 5.0 > 150 10.0						X	
8.7.1 Not to exceed 10 ug/l in the Ohio River (O Zone 1) main stem (see section 7.1.d)						X	
~~8.7.2 Not to exceed 0.4 ug/l where hardness is less than 75 mg/l as $CaCO_3$ and 1.2 ug/l in water where hardness is greater than 75 mg/l as $CaCO_3$~~				X			
8.7.3 The four-day average concentration of total recoverable cadmium shall not exceed the value determined by the following equation: $Cd = e^{(0.7852[\ln(hardness)]-3.490}$		X		X	X		

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.7.4 The one-hour average concentration of total recoverable cadmium shall not exceed the value determined by the following equation: $Cd = e^{(1.128[\ln(hardness)]-3.828}$	X		X				
8.8 Chloride (mg/l) Not to exceed:	860	~~250~~ 230	860	~~250~~ 230	250	250	
8.9 Copper (ug/l) Not to exceed:						1000	
8.9.1 ~~Not to~~ The four-day average concentration of total recoverable copper shall not exceed the value determined by the following equation[4]: $Cu = e^{(0.8545[\ln(hardness)-1.465])}$		X		X			

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.9.2 The one-hour average concentration of total recoverable copper shall not exceed the value determined by the following equation[a]: $Cu = e^{(0.9422[\ln(hardness)]-1.464}$	X		X				
8.10 Cyanide (ug/l) (As free cyanide $HCN+CN^-$) Not to exceed:	22	5.0	22	5.0	5.0	5.0	
8.11 Dissolved Oxygen[c]: not less than 5 mg/l at any time.	X				X	X	X
8.11.1 Kanawha River main stem, Zone 1 - Not less than 4.0 mg/l at any time.	X						

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.11.2 Ohio River main stem - the average concentration shall not be less than 5.0 mg/l per calendar day and shall not be less than 4.0 mg/l at any time or place outside any established mixing zone - provided that a minimum of 5.0 mg/l at any time is maintained during the April 15-June 15 spawning season.		X					
8.11.3. Not less than 7.0 mg/l in spawning areas and in no case less than 6.0 mg/l at any time.			X				

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.12 Fecal Coliform: Maximum allowable level of fecal coliform content for Primary Contact Recreation (either MPN or MF) shall not exceed 200/100 ml as a monthly geometric mean based on not less than 5 samples per month; nor to exceed 400/100 ml in more than ten percent of all samples taken during the month.					X	X	
8.12.1 Ohio River main stem (zone 1) - During the non-recreational season (November through April only) the maximum allowable level of fecal coliform for the Ohio River (either MPN or MF) shall not exceed 2000/100 ml as a monthly geometric mean based on not less than 5 samples per month.					X		

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.13 Fluoride (mg/l) Not to exceed:						1.4	
8.13.1 Not to exceed 2.0 for category D uses							X
8.14 Hexavalent chromium (ug/l) Not to exceed:	<u>16</u>	~~10~~ <u>11</u>	<u>16</u>	7.2		50	
8.15 Iron[c] (mg/l) Not to exceed:		1.5		0.5		1.5	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.15.1 Effluent limitations which may result in a concentration of up to 3.5 mg/l total iron in the stream are allowable upon a demonstration to the Chief by the applicant that such concentration will not have an adverse impact upon designated stream uses. This demonstration is subject to EPA approval and must show either: (1) that the stream is supporting designated uses while containing total iron concentrations higher than the applicable criteria or (2) the stream does not have an aquatic life use to protect. Notwithstanding Section 4 herein, this demonstration shall be the only demonstration required before the Chief and the Board with respect to							

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
water quality related effluent limitations. This exception does not apply to trout waters.		X					
8.16 Lead (ug/l) Not to exceed:						50	
8.16.1 The four-day average concentration of total recoverable lead shall not exceed the value determined by the following equation[a]: $Pb = e^{(1.273[\ln(\text{hardness})]-4.705}$		X		X			
8.16.2 The one-hour average concentration of total recoverable lead shall not exceed the value determined by the following equation[a]: $Pb = e^{(1.273[\ln(\text{hardness})]-1.46)}$	X		X				
8.17 Manganese (mg/l) Not to exceed:		1.0		1.0		1.0	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.17.1 Effluent limitations which may result in a concentration up to 2.0 mg/l Mn in the stream are allowable upon a demonstration to the Chief by the applicant that such concentration will not have an adverse impact upon designated stream uses. This demonstration is subject to EPA approval and must show either: (1) the stream is supporting designated uses while containing Mn concentrations higher than the applicable criteria, or (2) the stream does not have an aquatic life use to protect. Notwithstanding § 4 herein this demonstration shall be the only one required before the Chief and Board regarding water quality related effluent limitations.		X					

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.18 Mercury The total organism body burden of any aquatic species shall not exceed 0.5 ug/g as methylmercury.		~~0.5~~		~~0.5~~	0.5	0.5	
8.18.1 Total mercury in any unfiltered water sample shall not exceed (ug/l):	2.4		2.4		~~0.20~~ 0.15	~~0.20~~ 0.14	
8.18.2 Methylmercury (water column) Not to exceed (ug/l):		.012		.012			
8.19 Nickel (ug/l) Not to exceed:				50	4600	510	
8.19.1 The four-day average concentration of nickel shall not exceed the value determined by the following equation[a]: $Ni = e^{\{0.846[\ln(\text{hardness})]+1.1645\}}$		X					

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.19.2 The one-hour average concentration of total recoverable nickel shall not exceed the value determined by the following equation[a]: $Ni = e^{(0.846[\ln(hardness)]+3.361)}$	X		X				
8.20 Nitrate (as Nitrate-N) (mg/l)						10	
8.21 Nitrite (as Nitrite -N) (mg/l) Not to exceed:	1.0		.060				
8.22 Organics							
Chlordane[b] (ng/l)	2400	~~0.46~~ 4.3	2400	~~0.46~~ 4.3	0.46	0.46	0.46
DDT[b] (ng/l)	1100	~~0.024~~ 1.0	1100	~~0.024~~ 1.0	0.024	0.024	0.024
Aldrin[b] (ng/l)	3.0	0.071	3.0	0.071	0.071	0.071	0.071
Dieldrin[b] (ng/l)	2500	~~0.071~~ 1.9	2500	~~0.071~~ 1.9	0.071	0.071	0.071

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
Endrin (~~ug~~ ng/l)	180	~~.0023~~ 2.3	180	~~.0023~~ 2.3	~~.0023~~ 2.3	~~.0023~~ 2.3	~~.0023~~ 2.3
Toxaphene[b] (ng/l)	730	~~0.71~~ 0.2	730	~~0.71~~ 0.2	~~0.71~~ 0.73	~~0.71~~ 0.73	~~0.71~~ 0.73
PCB[b] (ng/l)		~~0.079~~ 14.0		~~0.079~~ 14.0	~~0.079~~ 0.045	~~0.079~~ 0.044	~~0.079~~ 0.045
Methoxychlor (ug/l)		0.03		0.03	0.03	0.03	0.03
Dioxin (2,3,7,8-TCDD)[b] (pg/l)		~~0.014~~		~~0.014~~	0.014	0.013	0.014
Acrylonitrile[b] (ug/l)		~~0.77~~		~~0.77~~	0.66	0.059	
Benzene[b] (ug/l)		~~40~~		~~40~~	71	0.66	
1,2-dichlorobenzene (mg/l)		~~17~~		~~17~~	17	2.7	
1,3-dichlorobenzene (mg/l)		~~2.6~~		~~2.6~~	2.6	0.4	
1,4-dichlorobenzene (mg/l)		~~2.6~~		~~2.6~~	2.6	0.4	
2,4-dinitrotoluene[b] (ug/l)		~~9.1~~		~~9.1~~	9.1	0.11	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
Hexachlorobenzene[b] (ng/l)		~~0.74~~		~~0.74~~	0.77	0.72	
Carbon tetrachloride[b] (ug/l)		~~4.4~~		~~4.4~~	4.4	0.25	
Chloroform[b] (ug/l)		~~15.7~~		~~15.7~~	470	0.19	
Halomethanes (ug/l)		~~15.7~~		~~15.7~~	15.7	0.19	
1,2-dichloroethane[b] (ug/l)		~~98.6~~		~~98.6~~	99	0.035	
1,1,1-trichloroethane[b] (mg/l)		~~67.3~~		~~67.3~~		~~1.2~~ 12	
1,1,2,2-tetrachloroethane (ug/l)		10.7		10.7	11	0.17	
1,1-dichloroethylene[b] (ug/l)		~~1.9~~		~~1.9~~	3.2	0.03	
Trichloroethylene[b] (ug/l)		~~92.4~~		~~92.4~~	81	~~3.1~~ 2.7	
Tetrachloroethylene[b] (ug/l)		~~8.9~~		~~8.9~~	8.85	0.8	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
Toluene[b] (mg/l)		~~424~~		~~424~~	200	~~14.3~~ 6.8	
Polynuclear Aromatic Hydrocarbons (PAH)[b] (~~ng~~ ug/l)		~~31.1~~		~~31.1~~	0.031	~~2.8~~ .0028	
Phthalate esters (ug/l)		3.0		3.0			
Vinyl chloride[b] (chloroethene)(ug/l)		~~525~~		~~525~~	525	2.0	
alpa-BHC (alpha-Hexachloro-cyclohexane)[b] (ug/l)					0.013	.0039	
beta-BHC(beta-Hexachloro-cyclohexane)[b] (ug/l)					0.046	0.014	
gamma-BHC (gamma-Hexachloro-cyclohexane)[b] (ug/l)	2.0	0.08	2.0	0.08	0.063	0.019	
Chlorobenzene (mg/l)					21	0.68	
Ethylbenzene (mg/l)					29	3.1	
Heptachlor[b] (ng/l)	520	3.8	520	3.8	0.21	0.21	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
2-methyl-4,6-Dinitrophenol (ug/l)					765	13.4	
Fluoranthene (ug/l)					370	300	
8.22.1 The organic chemicals listed in §8.22 shall not exceed the specified water quality criteria. When the specified criteria are less than the practical laboratory quantification level, instream values will be calculated from discharge concentrations and flow rates and from fish body burden, where applicable.							

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.22.2 The following body burden criteria shall not be exceeded in edible tissues of fish:							
Parameter — Body Burden							
Chlordane — 1.0 (ug/g)							
DDT — 0.1 (ug/g)							
Aldrin - Dieldrin — 0.3 (ug/g)							
Endrin — 0.3 (ug/g)							
Toxaphene — 1.0 (ug/g)							
PCB — 2.0 (ug/g)							
Dioxin — 6.4 (pg/g)							
8.23 pH[e] No values below 6.0 nor above 9.0. Higher values due to photosynthetic activity may be tolerated.	X	X	X	X	X	X	X
8.24 Phenolic materials (ug/l) Not to exceed:	5		5			5	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.25 Radioactivity: Gross Beta activity not to exceed 1000 picocuries per liter (pCi/l), nor shall activity from dissolved strontium-90 exceed 10 pCi/l, nor shall activity from dissolved alpha emitters exceed 3 pCi/l.	X		X		X	X	X

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.25.1 Gross total alpha particle activity (including radium-226 but excluding radon and uranium shall not exceed 15 pCi/l and combined radium-226 and radium-228 shall not exceed 5pCi/l; provided that the specific determination of radium-226 and radium-228 are not required if dissolved particle activity does not exceed 5pCi/l; the concentration of tritium shall not exceed 20,000 pCi/l; the concentration of total strontium-90 shall not exceed 8 pCi/l in the Ohio River main stem.	X		X		X	X	X
8.26 Selenium (ug/l) Not to exceed:	20	5	20	5		10	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.27 Silver Hardness — Silver (ug/l) 0-50 — 1 51-100 — 4 101-200 — 12 >201 — 24				X		X	
8.27.1 0-50 — 1 51-100 — 4 101-200 — 12 201-400 — 24 401-500 — 30 501-600 — 43		X					
8.27.2 The one-hour average concentration of total recoverable silver shall not exceed the value determined by the following equation: $Ag=e^{(1.72[\ln(\text{hardness})]-6.52)}$	X		X				
8.28 Temperature Temperature rise shall be							

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
limited to no more than 5°F above natural temperature, not to exceed 87°F at any time during months of May through November and not to exceed 73°F at any time during the months of December through April. During any month of the year, heat should not be added to a stream in excess of the amount that will raise the temperature of the water more than 5°F above natural temperature. In lakes and reservoirs, the temperature of the epilimnion should not be raised more than 3°F by the addition of heat of artificial origin. The normal daily and seasonable temperature fluctuations that existed before the addition of heat due to other natural causes should be maintained.	X						

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.28.1 For the Kanawha River Main Stem (K-1): Temperature rise shall be limited to no more than 5°F above natural temperature, not to exceed 90°F in any case.		X					
8.28.2 For the Bluestone R (KNB), Bluestone Lake (KN-60) East River (KNE), New River (KN), Gauley R. (KG) and Greenbrier River (KNG): Temperature rise shall be limited to no more than 5°F above natural temperature, not to exceed 81°F at any time during the months of May through November and not to exceed 73°F at any time during December through April.			X				

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.28.3 No heated effluents will be discharged in the vicinity of spawning areas. The maximum temperatures for cold waters are expressed in the following table: Daily Mean °F / Hourly Max °F Oct-Apr 50 55 Sep-May 58 62 Jun-Aug 66 70			X				

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.28.4 For Ohio River Main Stem (01)(Section 7.1.d):							
Dates / Period Ave. / Inst. Max.							
Jan 1-31: 45°F / 50°F							
February: 45 / 50							
March 1-15: 51 / 56							
March 16-31: 54 / 59							
April 1-15: 58 / 64							
April 16-30: 64 / 69							
May 1-15: 68 / 73							
May 16-31: 75 / 80							
June 1-15: 80 / 85							
June 16-30: 83 / 87							
July 1-31: 84 / 89							
August 1-31: 84 / 89							
Sept 1-15: 84 / 87							
Sept 16-30: 82 / 86							
Oct 1-15: 77 / 82							
Oct 16-31: 72 / 77							
Nov 1-30: 67 / 72							
Dec 1-31: 52 / 57		X					
8.29 Thallium (ug/l)					6.3	1.7	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.30 Threshold odor[c] Not to exceed a threshold odor number of 8 at 104°F as a daily average.		X		X	X	X	
8.31 Total Residual Chlorine (ug/l - measured by amperometric or equivalent method) ~~Not to exceed 10/ug/l as measured by the amperometric or equivalent method.~~ Not to exceed:	19	~~10~~ 11			10	10	
8.31.1 No chlorinated discharge allowed				X			
~~8.31.2 The following chart may be used to derive the criteria instead of the above fixed (10 ug/l) figure: (Mattice and Zittle Scale)~~							

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.32 Turbidity No point or non-point source to West Virginia's waters shall contribute a net load of suspended matter such that the turbidity exceeds 10 NTU's over background turbidity when the background is 50 NTU or less, or have more than a 10% increase in turbidity (plus 10 NTU minimum) when the background turbidity is more than 50 NTUs.							

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
This limitation shall apply to all earth disturbance activities and shall be determined by measuring stream quality directly above and below the area where drainage from such activity enters the affected stream. Any earth disturbing activity continuously or intermittently carried on by the same or associated persons on the same stream or tributary segment shall be allowed a single net loading increase.		X		X	X	X	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.32.1 This rule shall not apply to those activities at which Best Management Practices in accordance with the State's adopted 208 Water Quality Management Plan are being utilized, maintained and completed on a site specific basis as determined by the appropriate 208 cooperative or an approved Federal or State Surface Mining Permit is in effect. This exemption shall not apply to Trout Waters.		X			X	X	
8.33 Zinc: Hardness mg/l CaCo3 — Zinc ug/l 0-50 — 50 151-300 — 100 301-400 — 300 >401 — 600						X	

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.33.1 ~~0-50 40~~ ~~51-80 75~~ ~~81-120 90~~ ~~121-160 110~~ ~~161-200 130~~ ~~201-240 150~~ ~~241-280 175~~ ~~281-300 220~~ ~~301-320 270~~ ~~321-340 320~~ ~~341-400 370~~ ~~>401 600~~ The four-day average concentration of total recoverable zinc shall not exceed the value determined by the following equation[8]: $Zn = e^{(0.8473[\ln(\text{hardness})]+0.7614)}$		X		X			

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			
8.33.2 The one-hour average concentration of total recoverable zinc shall not exceed the value determined by the following equation[a]: $Zn = e^{(0.847[\ln(hardness)]+0.8604}$	X		X				
~~8.33.3 Not to exceed 47 ug/l~~				~~X~~			

1 One hour average concentration not to be exceeded more than once every three years on the average, unless otherwise noted.

2 Four-day average concentration not to be exceeded more than once every three years on the average, unless otherwise noted.

3 These criteria have been calculated to protect human health from toxic effects through fish consumption, unless otherwise noted.

4 These criteria have been calculated to protect human health from toxic effects through drinking water and fish consumption, unless otherwise noted.

PARAMETER	USE DESIGNATION						
	AQUATIC LIFE				HUMAN HEALTH		ALL OTHER USES
	B1, 3, 4		B2		C[3]	A[4]	
	ACUTE[1]	CHRON[2]	ACUTE[1]	CHRON[2]			

a Hardness as calcium carbonate (mg/l). The minimum hardness allowed for use is this equation shall not be less than 25 mg/l, even if the actual ambient hardness is less than 25 mg/l The maximum hardness value for use in this equation shall not exceed 400 mg.l even if the actual hardness is greater than 400 mg/l.

b Known or suspected carcinogen. Human health standards are for a risk level of 10^{-6}

c May not be applicable to wetlands (B4) - site-specific criteria are desirable.

West Virginia Legislature

Legislative Rule-Making Review Committee

Room M-152, State Capitol
Charleston, West Virginia 25305
(304)340-3286

January 9, 1995

Senator Joe Manchin, III, Co-Chair
Delegate Brian A. Gallagher, Co-Chair

Debra A. Graham, Counsel
Marie Nickerson, Admr. Assistant

NOTICE OF ACTION TAKEN BY LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

TO: Ken Hechler, Secretary of State, State Register

TO: David C. Callaghan, Commissioner
Bureau of Environment
10 McJunkin Road
Nitro, WV 25143-2506

FROM: Legislative Rule-Making Review Committee

PROPOSED RULE: Requirements Governing Water Quality Standards

The Legislative Rule-Making Review Committee recommends that the West Virginia Legislature:

1. Authorize the agency to promulgate the Legislative Rule
   (a) as originally filed ____
   (b) as modified by the agency __X__

2. Authorize the agency to promulgate part of the Legislative rule; a statement of reasons for such recommendation is attached. ____

3. Authorize the agency to promulgate the Legislative rule with certain amendments; amendments and a statement of reasons for such recommendation is attached. ____

4. Authorize the agency to promulgate the Legislative rule as modified with certain amendments; amendments and a statement of reasons for such recommendation is attached. ____

5. Recommends that the rule be withdrawn; a statement of reasons for such recommendation is attached. ____

Pursuant to Code 29A-3-11(c), this notice has been filed in the State Register and with the agency proposing the rule.

cc: Francis Hunter
Libby Chatfield