

WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

Form #8

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OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

NOTICE OF AN EMERGENCY AMENDMENT TO AN EMERGENCY RULE

AGENCY: State Water Resources Board TITLE NUMBER: 46

DATE EMERGENCY RULE WAS ORIGINALLY FILED: August 15, 1988

IS THIS THE FIRST EMERGENCY AMENDMENT TO THE ORIGINALLY FILED EMERGENCY RULE:

Yes

IS THIS THE SECOND EMERGENCY AMENDMENT TO THE ORIGINALLY FILED EMERGENCY RULE:

DATE OF FIRST EMERGENCY AMENDMENT: _____

SERIES NUMBER OF RULE: 1 TITLE OF RULE Requirements

Governing Water Quality Standards

THE ATTACHED IS AN EMERGENCY AMENDMENT TO AN EXISTING EMERGENCY RULE. THIS EMERGENCY AMENDMENT BECOMES EFFECTIVE UPON FILING.

Frances E. Hunter JRT



STATE OF WEST VIRGINIA
STATE WATER RESOURCES BOARD

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Charleston, West Virginia 25311
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January 17, 1989

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WILLIAM PLASS
21 Grandview Drive
Princeton, West Virginia

The Honorable Ken Hechler
Secretary of State
state Capitol Bldg. # 1 Room E157K
Charleston, West Virginia 25305

Re: Notice of Filing of Emergency Rule

Dear Mr. Secretary:

The State Water Resources Board, after duly complying with applicable W. Va. Administrative procedures, hereby submits for filing, pursuant to W. Va. Code 29A-3-15, the attached Emergency Rule.

Very truly yours,

A handwritten signature in cursive script that reads "Frances E. Hunter".

Frances E. Hunter
Executive Secretary

attachments

1. Emergency Rule
2. Facts and circumstances

INFORMATION SHEET

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A. Applicant's Name Union Carbide Corporation
Facility: Technical Center
 South Charleston, WV

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B. Water Body Proposed for Revision

Name: Ward Hollow
 Stream Code: K-39-A

Brief Description: Ward Hollow is a very small tributary of Davis Creek which flows into the Kanawha River. This stream is almost totally composed of cooling tower blowdown and runoff from Tech Center parking lots. Stream width rarely exceeds one foot and water depth is generally less than six inches. The stream is almost totally within the fenced boundaries of the Tech Center property.

C. Designated Uses

Existing: B3 - Small Non-Fishable Stream
 Proposed: No Change

D. Changes in Water Quality Criteria for Segment

Current: Chlorides not to exceed 250 mg/l
 Proposed: Chlorides not to exceed 540 mg/l

E. Appropriateness of Revision

The company has performed chronic toxicity testing which indicated that the proposed 540 mg/l chloride criteria will fully protect the B3 use of the stream. There will be no effect on downstream uses.

F. Summary of Implications of Revision

The proposed criterion should not produce a noticeable effect on the aquatic community of Ward Hollow or any downstream waters.

If this revision were disallowed, unnecessary capital expenditures and occasional violations of water quality standards would occur. Chloride content of the discharge is variable and presently outside of the control of the company. Violations of the chloride standard up to 540 mg/l would not affect stream uses but would place the company in jeopardy of enforcement actions and civil or criminal penalties.

G. The Chief's Recommendation

The Chief after review of the support document and studies has indicated no opposition to this revision.

H. Other Information Deemed Necessary

Public comments. Public hearing was held on September 14, 1988 in conjunction with the public hearing on the triennial revision of water quality standards. No public comments were received in opposition to this revision.

FACTS AND CIRCUMSTANCES

WV Code 20-5A-1 et seq. authorizes the State Water Resources Board to promulgate rules establishing water quality standards for the waters of the State. These rules should be consistent with the public policy of the State Water Pollution Control Act which provides, in part, for "the expansion of employment opportunities...and a permanent foundation for healthy industrial development." Standards more stringent than necessary to protect stream uses may restrict healthy industrial development and thereby cause substantial harm to the public interest.

The Board has followed the proper procedures for revising Legislative rules and has submitted this site-specific revision to the Legislative Rule Making Review Committee as part of its triennial revision of water quality standards. This revision is found in Series 1, Section 7.2.d.20.C of the Board's approved proposed rules and would be found in Section 7.2.f.5.iii in the existing Series 1.

In the Board's unanimous opinion, filing of this revision as an emergency rule is justified for the following reasons:

1. If this water quality standard revision is not implemented immediately, there will be a delay in modifying the company's WV/NPDES permit to reflect the reasonable and protective chloride standard for the stream. Modification of the permit in a timely fashion will prevent the possible imposition of unjustified civil or criminal penalties on the company. In the alternative, if the company is required to comply with the terms of a permit which does not reflect this revision, substantial capital outlay will be required for minimal or no environmental benefit to the stream.

2. The company has complied with all requirements imposed by the Board, Division of Water Resources and EPA to scientifically justify the proposed criterion. Both EPA and Division of Water Resources agree that a chloride criterion of 540 mg/l is appropriate for Ward Hollow.

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EMERGENCY
WEST VIRGINIA LEGISLATIVE RULES
STATE WATER RESOURCES BOARD

Chapter 20-5 and 20-5A

Series I

(1988)

WATER QUALITY STANDARDS

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WEST VIRGINIA LEGISLATIVE RULES
STATE WATER RESOURCES BOARD
Chapter 20-5 and 20-5A
Series I

(1988)

I N D E X

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 1

WEST VIRGINIA LEGISLATIVE RULE
STATE WATER RESOURCES BOARD
Chapter 20-5 and 20-5A
Series I
1985

Title: Requirements Governing Water Quality
Standards

Section 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, 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.)

1.2 Authority - W. Va. Code 20-5A-3.

1.3 Filing Date - January 17, 1989.

1.4 Effective Date - January 17, 1989.

1.5 Repeal of Former Rule - This Legislative rule repeals West Virginia Administrative Regulations, State Water Resources Board, Chapter 20-5 and 5A, Series I (1983), "Requirements Governing Water Quality Standards", filed May 17, 1988.

Section 2. Definitions

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 2

The following definitions in addition to those set forth in Chapter 20, Article 5A, Section 2, 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 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 95-217, 33 U.S.C. 1251, et seq.

2.4 "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 "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 "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 "Natural" or "naturally occurring" values or "natural temperature" shall mean for all of the waters of the State:

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

2.7.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.

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 2.8

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

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

2.10 "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.

2.11 "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.

2.12 The "State Act" or "State Law" shall mean the West Virginia Water Pollution Control Act, West Virginia Code 20-5A-1, et seq.

2.13 "Total recoverable" refers to the digestion procedure for certain heavy metals as referenced in 40 CFR 136, October 26, 1984, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act.

2.14 "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.

2.15 "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.

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

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

Section 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 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:

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

3.2.b Deposits or sludge banks on the bottom.

3.2.c Odors in the vicinity of the waters;

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

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

3.2.f Distinctly visible color;

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

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

3.2.i Any other condition, including radiological exposure, which alters the chemical, physical or biological integrity of the waters of the State.

Section 4. Anti-degradation Policy.

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Leg. Rule, 20-5 & 20-5A

Series I, Sec. 4.1

4.1 It is the policy of the State of West Virginia that instream water uses shall be maintained and protected as follows:

4.1.a Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. 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 4.1.d).

4.1.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:

4.1.b.1 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

4.1.b.2 Naturally-occurring pollutant concentrations prevent the attainment of the use; or

4.1.b.3 Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use; or unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges to enable uses to be met;

4.1.b.4 Human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 4.1.b.4

or would cause more environmental damage to correct than to leave in place; or

4.1.b.5 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

4.1.b.6 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.

4.1.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.

4.1.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 section three(a), Article five A, chapter twenty of the West Virginia Code 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.

4.1.e With the exception of the provisions of Section 7.1.a of this series, the waters of the State must be maintained at their existing quality unless it is determined after 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.

4.1.f 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.

4.1.g In all cases, waters which constitute an outstanding national resource as designated in Section 7.3.b shall be maintained and protected and improved where necessary.

4.1.h 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.

Section 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:

5.2.a Mixing zones shall:

5.2.a.1 Be kept as small as practical in area and length;

5.2.a.2 Not be used for, or considered as, a substitute for waste treatment;

5.2.a.3 Provide for as rapid a mixing as practical;

5.2.a.4 Not prevent the free passage of aquatic species or include spawning or nursery areas;

5.2.a.5 Not overlap a public water supply intake;

5.2.a.6 Not cause or contribute to any of the conditions prohibited in Section 3; and

5.2.a.7 Not interfere with any designated water use category.

5.3 The boundaries of the mixing zone shall reflect:

5.3.a Receiving water body characteristics such as:

5.3.a.1 Water quality,

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 5.3.a.2

- 5.3.a.2 Local meteorology,
- 5.3.a.3 Flow regime (including low-flow records),
- 5.3.a.4 Magnitude of water exchange at point of discharge,
- 5.3.a.5 Stratification phenomena,
- 5.3.a.6 Waste capacity of the receiving system including retention time,
- 5.3.a.7 Turbulence and speed of flow,
- 5.3.a.8 Morphology of the receiving system as related to plume behavior, and biological phenomena;
- 5.3.a.9 Designated water use categories; and
- 5.3.b Discharge characteristics such as:
 - 5.3.b.1 Flow regime,
 - 5.3.b.2 Volume,
 - 5.3.b.3 Design,
 - 5.3.b.4 Location,
 - 5.3.b.5 Rate of mixing and dilution, and
 - 5.3.b.6 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 7-day, 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.

Section 6. Water Use Categories

6.1 These rules establish general Water Use Categories and Water Quality Standards for the waters of the

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Leg. Rule, 20-5 & 20-5A

Series I, Sec. 6.1

State. Incidental utilization for whatever purpose may or may not constitute a justification for assignment of a Water Use Category to a particular stream segment.

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:

6.2.a All community domestic water supply systems;

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

6.2.c All private domestic water systems; and

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

6.2.e Shall apply to the stream segment extending upstream from the intake for a distance as defined in Section 7.1.b.2 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:

6.3.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.)

6.3.b Category B2 - Trout Waters - See Section 2 and Appendix A for a representative list.

6.3.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 minnows, darters, etc.

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.

6.5 Category D - Agriculture and Wildlife Uses.

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Leg. Rule, 20-5 & 20-5A

Series I, Sec. 6.5.a

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

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

6.5.c Category D3 - Wildlife. This category includes all stream segments 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.

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

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

6.6.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.)

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

Section 7. WEST VIRGINIA WATERS

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

7.1.a 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 7-consecutive-day drought flow with a 10-year return frequency (7Q10). NOTE: Exceptions do not apply to Trout Waters.

7.1.a.1 Exceptions: Water quality standards shall not apply: (See Section 7.2 for site specific exceptions.)

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 7.1.a.1.i

7.1.a.1.i When the flow is less than 7Q10;

7.1.a.1.ii In wet weather streams, or intermittent streams, when they are dry or have no measurable flow, provided that the designated uses of downstream waters are not adversely affected;

7.1.a.1.iii In any mixing zones which are established pursuant to Section 5 of these rules;

7.1.a.1.iv Where lesser quality is due to natural conditions. In such cases the naturally occurring values shall be the applicable criteria.

7.1.b Water Use Categories as described in Section 6.

7.1.b.1 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.

7.1.b.2 Each segment extending upstream from the intake of a water supply public (Water Use Category A), for a distance of (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, Division of Water Resources, Department 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.)

7.2 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).

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

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Leg. Rule, 20-5 & 20-5A

Series I, Sec. 7.2.b

7.2.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:

7.2.b.1 PS - Shenandoah River and all its tributaries arising in West Virginia to the West Virginia-Virginia State line.

7.2.b.2 PC - Cacapon River and all its tributaries.

7.2.b.3 PSB - South Branch and all its tributaries.

7.2.b.4 PNB - North Branch. All tributaries to the North Branch arising in West Virginia.

7.2.b.4.i Exceptions; to 7.2.b:

7.2.b.4.i.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 chlorides not to exceed 250 mg/l and fluoride not to exceed 2.0 mg/l.

7.2.b.4.i.B Except for Turkey Run, a small tributary of Opequon Creek (P-4) of the Potomac River, shall not have Water Use Category A; and therefore may contain fluoride not to exceed 8 mg/l, ammonia not to exceed 4 mg/l, chlorides not to exceed 530 mg/l, cyanide (as free cyanide HCN + CN) not to exceed 50 ug/l and hexavalent chromium (total) not to exceed 100 ug/l.

7.2.b.4.ii Exception; to 7.2.b.4. 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 to exceed 73°F at any time during the months of December through April.

7.2.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:

7.2.c.1 MC - Cheat River and all its tributaries except those listed below:

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 7.2.c.1.i

7.2.c.1.i MCB - Blackwater River and all its tributaries.

7.2.c.2 MW - West Fork River and all its tributaries.

7.2.c.3 MT - Tygart River and all its tributaries except those listed below:

7.2.c.3.i MTB - Buckhannon River and all its tributaries.

7.2.c.3.ii MTM - Middle Fork River and all its tributaries.

7.2.c.4 MY - Youghigheny River and all its tributaries to the West Virginia-Maryland State line.

7.2.c.5 Exception; to 7.2.c: 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.

7.2.c.5.i Exception; to 7.2.c.4: Water Use Categories D, and E are excluded from the tributaries of the Youghiogheny River in West Virginia which flow into Maryland.

7.2.c.6 Exception to 7.2.c: Except 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/l, oil and grease not to exceed 15 mg/l, Ammonia-Nitrogen not to exceed 30 mg/l, total phenols not to exceed .10 mg/l, total cyanide not to exceed .05 mg/l, total manganese not to exceed 4 mg/l, total zinc not to exceed 1.5 mg/l, total copper not to exceed 1.0 mg/l, Benzene not to exceed .05 mg/l, Napthalene not to exceed .0t mg/l and Benzo (a) Pyrene not to exceed .0t mg/l and iron not to exceed 4 mg/l for the months June through November and 7 mg/l for the months December through May.

7.2.d O - Ohio River Basin. The Ohio River and all its tributaries to the West Virginia-Ohio-Pennsylvania State lines excluding the following major tributaries which are designated as follows:

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Leg. Rule, 20-5 & 20-5A

Series I, Sec. 7.2.d.1

7.2.d.1 01 - 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.

7.2.d.2 02 - Ohio River - tributaries. All tributaries of the Ohio River excluding the following major tributaries:

7.2.d.2.i Exceptions; to 7.2.d.2:

7.2.d.2.i.A Except the stretch of Conners Run (O-77-A) (a tributary of Fish Creek), shall not have the Water Use Category A; therefore may contain arsenic not to exceed 200 ug/l and selenium not to exceed 62 ug/l, and iron not to exceed 3.5 mg/l as a monthly average and 7 mg/l as a daily maximum.

7.2.d.2.i.B Except for that segment of Harmon Creek (O-97) from its confluence with the Ohio River to a point 2.2 miles upstream 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/l and total fluoride shall not exceed 2.0 mg/l, each as thirty (30) day average values to be determined from four (4) weekly samples.

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

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

7.2.e.1 LKH - Hughes River and all its tributaries.

7.2.f 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.

7.2.f.1 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:

7.2.f.2 KP - Pocatalico River and all its tributaries.

EMERGENCY

WQS

Leg. Rule, 20-5 & 20-5A
Series I, Sec. 7.2.f.3

- 7.2.f.3 KC - Coal River and all its tributaries.
- 7.2.f.4 KE - Elk River and all its tributaries.
- 7.2.f.5.i Exceptions; to 7.2.f:
- 7.2.f.5.i.A For the Kanawha River main stem, Zone 1, Water Use Category A shall not apply; and
- 7.2.f.5.i.B The minimum flow shall be 1,960 cfs at the Charleston gauge.
- 7.2.f.5.ii Exceptions; to 7.2.f.1:
- 7.2.f.5.ii.A For the main stem of the Kanawha River only, the minimum flow shall be 1,896 cfs at mile point 72.
- 7.2.f.5.ii.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; therefore may contain arsenic not to exceed 200 ug/l and selenium not to exceed 62 ug/l.
- 7.2.f.5.ii.C Except for Ward Hollow (K-39-A), a small tributary of Davis Creek which may contain chlorides not to exceed 540 mc/l.
- 7.2.f.6 KG - Gauley River. The Gauley River and all its tributaries excluding the following major tributaries which are designated as follows:
- 7.2.f.6.i KGM - Meadow River and all its tributaries.
- 7.2.f.6.ii KG34 - Cherry River and all its tributaries.
- 7.2.f.6.iii KGCR - Cranberry River and all its tributaries.
- 7.2.f.6.iv KGW - Williams River and all its tributaries.
- 7.2.f.7 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:
- 7.2.f.7.i KNG - Greenbrier River and all its tributaries.
- 7.2.f.7.ii KNB - Bluestone River and all its tributaries.
- 7.2.f.7.iii KNE - East River and all its tributaries.

EMERGENCY
WQS
Leg. Rule, 20-5 & 20-5A
Series I, Sec. 7.2.f.7.iv

7.2.f.7.iv KN-60 - Bluestone Lake.

7.2.f.8 Exception; to 7.2.f: 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 specific criterion for iron shall be 3.0 mg/l total iron, and from that point to the confluence of Laurel Creek and the New River, the specific criterion for iron shall be 1.0 mg/l total iron.

7.2.f.9 Exception; to 7.2.f.7.i: Water Use Category A shall not apply to that segment of the East Fork of the Greenbrier River from the reservoir located at the tannery to the confluence with the West Fork. That segment of the East Fork therefore may contain chlorides not to exceed 600 mg/l maximum daily.

7.2.f.10 Exception; to 7.2.f.7.iv: 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.

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

7.2.g.i OGM - Mud River and all its tributaries.

7.2.h 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:

7.2.h.i BST - Tug Fork and all its tributaries.

7.3 Special Waters of the State

7.3.a High Quality Waters. High quality waters shall include but are not limited to:

7.3.a.1 All streams designated by the West Virginia Legislature under the West Virginia Natural Streams Preservation Act, West Virginia Code 25-5B-1, et seq.

EMERGENCY

WQS

Leg. Rule, 20-5 & 20-5A

Series I, Sec. 7.3.a.2

7.3.a.2 West Virginia High Quality Streams Fourth Edition, prepared by the Wildlife Resources Division, Department of Natural Resources (1979).

7.3.b National Resource Waters. National Resource Waters shall include but are not limited to the following waters of the State:

7.3.b.1 All Federally designated rivers under the "Wild and Scenic Rivers Act", Public Law 95-542, as amended, 16 U.S.C. 1271, et seq.

7.3.b.2 All naturally reproducing trout streams.

7.3.b.3 All streams and other bodies of water in State and National Forests and Recreation Areas.

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

Section 8. Charts of Specific Water Quality Criteria

Specific state (i.e. total, total recoverable, valent, 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, October 26, 1984.

An "X" or numerical value in the use columns of this section shall represent the applicable criteria.

Charts and use of this section shall be applied in accordance with major stream and use applications, Sections 6 and 7.

EMERGENCY

WRB

Leg. Rule, 20-5 & 20-5A

Series I, Sec. 8.1

Section 8

SPECIFIC WATER QUALITY CRITERIA

PARAMETER	UNITS	USE DESIGNATIONS				
		Watershed B 1.5	Tributaries B 2	Recreation C	Public A	All Q:
8.1 ALUMINUM: Not to exceed 0.5 mg/l.	mg/l	0.5				
8.2 AMMONIA: The concentration of un-ionized ammonia (NH ₃) shall not exceed 50 ug/l. Un-ionized ammonia shall be determined from values of total ammonia-N, pH and temperature according to the following equation: Un-ionized ammonia = 1.2 (total ammonia-N / 1 = 10 (pk _a - pH) where pk _a = 0.0902 + 2730 / (273.2 + T) and T = temperature in degrees C.	ug/l	50			50	
8.2.1 The concentration of un-ionized ammonia shall not exceed 20 ug/l.	ug/l	20				
8.3 ARSENIC: Not to exceed 50 ug/l.	ug/l				50	
8.3.1 Not to exceed 100 ug/l (Category D Uses).	ug/l					100
8.3.2 Not to exceed 440 ug/l trivalent arsenic.	ug/l	440	440	440		
8.4 BARIUM: Not to exceed 1.0 mg/l.	mg/l				1	
8.5 CADMIUM: Hardness mg/l as CaCO ₃	Soluble Cadmium (ug/l)					
0-35	1					
36-75	2					

EMERGENCY

WRB

Leg. Rule, 20-5 & 20-5A
Series 1, Sec. 8.5

Section 8

SPECIFIC WATER
QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS				
		Wetland B 1.3	Treatwater B 2	Recreation C	Public A	All O
8.5 CADMIUM (Cont'd)						
76-150	5					
greater than 150	10			X		
.....						
8.5.1						
Not to exceed 10 ug/l in the Ohio River (O1) main stem (See Section 7.2.d.1)	ug/l				10	
.....						
8.5.2						
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 .	ug/l		X			
.....						
8.5.3						
Hardness	Total Recoverable					
mg/l as CaCO ₃	Cadmium (ug/l)					
0-25	3					
26-50	6					
51-75	8					
76-100	11					
101-150	17					
151-200	23					
201-300	36					
301-400	49	ug/l	X		X	
.....						
8.6 CHLORIDE:						
Not to exceed 250 mg/l.	mg/l	250	250	250	250	
.....						
8.7 COPPER:						
Not to exceed 1000 ug/l.	ug/l				1000	
.....						
8.7.1						
Hardness	Total recoverable					
mg/l as CaCO ₃	Copper ug/l					
50	6					
100	11					
200	20					
300	29					

EMERGENCY

WRB

Leg. Rule, 20-5 & 20-5A

Series I, Sec. 8.7.1

Section 8

SPECIFIC WATER
QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS				
		Warmwater B1.3	Trouwater B2	Recreation C	Public A	All Other
8.7.1 COPPER (Con't)						
400	38					
500	46					
600	55					
700	63	ug/l	X	X	---	---
8.8 CYANIDE:						
(As Free cyanide HCN + CN ⁻): Not to exceed 5 ug/l.		ug/l	5	5	5	5
8.9 DISSOLVED OXYGEN:						
Not less than 5.0 mg/l at any time.		mg/l	X	---	X	X
8.9.1						
Not less than 4.0 mg/l at any time in the Kanawha River main stem, Zone 1.		mg/l	X	---	---	---
8.9.2						
Concentration shall average 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. Ohio River main stem.		mg/l	X	---	---	---
8.9.3						
Not less than 7.0 mg/l in spawning areas and in no case less than 6.0 mg/l at any time.		mg/l	---	X	---	---
8.10 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 exceed 400/100 ml in more than ten percent of all samples taken during the month.		counts	---	---	X	X

EMERGENCY

WRB

Leg. Rule, 20-5 & 20-5A
Series 1, Sec. 8.10.1

Section 8

SPECIFIC WATER
QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS				
		Warmwater B1.3	Troulwater B2	Recreation C	Public A	All Other Use
<p>8.10.1 FECAL COLIFORM (Cont'd)</p> <p>For the Ohio River main stem (O-1). For 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.</p>	counts			X		
<p>8.11 FLUORIDE:</p> <p>Not to exceed 1.4 mg/l.</p>	mg/l				1.4	
<p>8.11.1</p> <p>Not to exceed 2.0 mg/l for D Uses.</p>	mg/l					2.0
<p>8.12 HEXAVALENT CHROMIUM:</p> <p>Not to exceed 50 ug/l.</p>	ug/l				50	
<p>8.12.1</p> <p>Not to exceed 10 ug/l.</p>	ug/l	10				
<p>8.12.2</p> <p>Not to exceed 7.2 ug/l.</p>	ug/l		7.2			
<p>8.13 IRON:</p> <p>Not to exceed 1.5 mg/l.</p> <p>Effluent limitations which may result in a concentration of up to 3.5 mg/l total iron in</p>	mg/l	1.5				1.5

EMERGENCY

WRB

Leg. Rule, 20-5 & 20-5A

Series I, Sec. 8.13

Section 8

SPECIFIC WATER
QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS																								
		Watershed B 1.3	Troutwater B 2	Recreation C	Public A	All Other																				
<p>8.13 IRON (Cont'd)</p> <p>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 Series I, Section 4 of the Board's rules, this demonstration shall be the only demonstration required before the Chief and the Board with respect to water quality related effluent limitations. This exception does not apply to Trout Waters.</p>	mg/l	X																								
<p>8.13.2</p> <p>Not to exceed 0.5 mg/l</p>	mg/l	---	0.5	---	---	---																				
<p>8.14 LEAD:</p> <p>Not to exceed 50 ug/l.</p>	ug/l				50																					
<p>8.14.1</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Hardness</td> <td style="width: 50%;">Lead</td> </tr> <tr> <td>mg/l as CaCO₃</td> <td>ug/l</td> </tr> <tr> <td>50</td> <td>1.0</td> </tr> <tr> <td>100</td> <td>3.8</td> </tr> <tr> <td>200</td> <td>20</td> </tr> <tr> <td>300</td> <td>50</td> </tr> <tr> <td>400</td> <td>100</td> </tr> <tr> <td>500</td> <td>168</td> </tr> <tr> <td>600</td> <td>258</td> </tr> <tr> <td>700</td> <td>371</td> </tr> </table>	Hardness	Lead	mg/l as CaCO ₃	ug/l	50	1.0	100	3.8	200	20	300	50	400	100	500	168	600	258	700	371	ug/l	X	X			
Hardness	Lead																									
mg/l as CaCO ₃	ug/l																									
50	1.0																									
100	3.8																									
200	20																									
300	50																									
400	100																									
500	168																									
600	258																									
700	371																									
<p>8.15 MANGANESE:</p> <p>Not to exceed 1.0 mg/l.</p>	mg/l	1.0	1.0		1.0																					

EMERGENCY

WRB

Leg. Rule, 20-5 & 20-5A
Series I, Sec. 8.15.1

Section 8

SPECIFIC WATER
QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS				
		Warmwater B 1.3	Freshwater B 2	Recreation C	Public A	All Other
<p>8.15.1 MANGANESE (Cont'd)</p> <p>Effluent limitations which may result in a concentration up to 2.0 mg/l manganese 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 manganese concentrations higher than the applicable criteria, or (2) the stream does not have an aquatic life use to protect. Notwithstanding Series I, Section 4 of the Board's rules, this demonstration shall be the only demonstration required before the Chief and the Board with respect to water quality related effluent limitations. This exception does not apply to trout waters.</p>	mg/l	X	---	---	---	---
<p>8.16 MERCURY: (total)</p> <p>The total organism body burden of any aquatic species shall not exceed 0.5 ug/g as total mercury.</p>	ug/g	0.5	0.5	---	---	---
<p>8.16.1</p> <p>Total mercury concentration in any unfiltered water sample shall not exceed 0.2 ug/l</p>	ug/l	0.2	0.2	0.2	0.2	---
<p>8.17 NICKEL:</p> <p>Not to exceed 50 ug/l.</p>	ug/l	---	50	---	---	---
<p>8.18 NITRATE: (as Nitrate - N)</p> <p>Not to exceed 10 mg/l.</p>	mg/l	---	---	---	10	---
<p>8.19 NITRITE: (as Nitrite - N)</p> <p>Not to exceed 1.0 mg/l.</p>	mg/l	1.0	---	---	---	---

EMERGENCY

WRB

Leg. Rule, 20-5 & 20-5A
Series I, Sec. 8.19.1

Section 8

SPECIFIC WATER
QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS				
		Wastewater B.1.3	Treatment B.2	Recreation C	Public A	All
8.19.1 NITRITE (as Nitrite - N) Cont'd						
Not to exceed 60 ug/l	ug/l		60			
8.20 ORGANICS:						
<u>Criteria ug/l</u>	<u>Body Burden ug/g</u>					
Chlordane .0043	1.0					
DDT .001	0.1					
Aldrin-Dieldrin .0019	0.3					
Endrin .0023	0.3					
Toxaphene .005	1.0					
PBC .001	2.0					
Methoxychlor .03						
The organic chemicals listed above shall not exceed the specified water quality criteria. When the specified criteria is less than the practical laboratory quantification level in-stream values will be calculated from discharge concentrations and flow rates and from fish body burden.		ug/g				
		ug/l	X	X	X	X
8.21 pH:						
No values below 6.0 nor above 9.0. Higher values due to photosynthetic activity may be tolerated.	unit	X	X	X	X	X
8.22 PHENOLIC MATERIALS:						
Not to exceed 5 ug/l.	ug/l	5	5		5	
8.23 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.	pCi/l	X	X	X	X	X

Section 8

SPECIFIC WATER
 QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS																																														
		Watershed B 1.3	Troutwater B 2	Recreation C	Public A	All Other																																										
8.23.1 RADIOACTIVITY (Cont'd) 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 5 pCi/l; provided that the specific determination of radium-226 and radium-228 are not required if dissolved particle activity does not exceed 5 pCi/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.	pCi/l	X	X	X	X	X																																										
8.24 SELENIUM: Not to exceed 10 ug/l.	ug/l	—	—	—	10	—																																										
8.24.1 Not to exceed 35 ug/l Selenite.	ug/l	35	35	—	—	—																																										
8.25 SILVER: <table border="0" style="width: 100%;"> <tr> <td style="text-align: left;"><u>Hardness</u></td> <td style="text-align: left;"><u>Silver ug/l</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0-50</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>51-100</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>101-200</td> <td>12</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>greater than 201</td> <td>24</td> <td></td> <td>X</td> <td></td> <td>X</td> <td></td> </tr> </table>	<u>Hardness</u>	<u>Silver ug/l</u>						0-50	1						51-100	4						101-200	12						greater than 201	24		X		X		ug/l	—	X	—	X	—							
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EMERGENCY

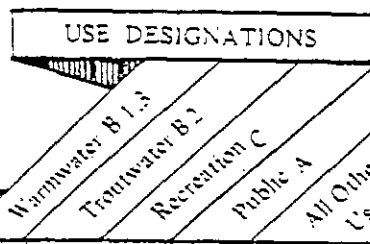
WRB

Leg. Rule, 20-5 & 20-5A

Series I, Sec. 8.26

Section 8

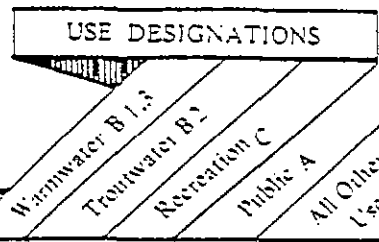
SPECIFIC WATER QUALITY CRITERIA



PARAMETER	UNITS	Warmwater B.1.3	Troutwater B.2	Recreation C	Public A	All Other Uses
<p>8.26 TEMPERATURE:</p> <p>Temperature rise shall be 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 than natural causes should be maintained.</p>	°F	X				
<p>8.26.1 For the Kanawha River Main Stem (K-1).</p> <p>Temperature rise shall be limited to no more than 5°F above natural temperature, not to exceed 90°F in any case.</p>			X			
<p>8.26.2 For the Bluestone R. (KNB), Bluestone Lake (KN-60), East River (KNE), New River (KN), Gauley R. (KG), and Greenbrier River (KNG).</p> <p>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.</p>			X			
<p>8.26.3</p> <p>No heated effluents will be discharged in the vicinity of spawning areas. The maximum temperatures for cold waters are expressed in</p>						

Section 8

SPECIFIC WATER QUALITY CRITERIA



PARAMETER	UNITS	Warmwater B1,3	Troutwater B2	Recreation C	Public A	All Other Uses																																																																																																																					
8.26.3 (Cont'd) the following table:																																																																																																																											
<table border="0"> <tr> <td></td> <td style="text-align: center;">Daily Mean °F</td> <td style="text-align: center;">Hourly Maximum °F</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Oct. - April</td> <td style="text-align: center;">50</td> <td style="text-align: center;">55</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sept. - May</td> <td style="text-align: center;">58</td> <td style="text-align: center;">62</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Transition Period</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>June - August</td> <td style="text-align: center;">66</td> <td style="text-align: center;">70</td> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> </tr> </table>		Daily Mean °F	Hourly Maximum °F					Oct. - April	50	55					Sept. - May	58	62					Transition Period							June - August	66	70	X																																																																																											
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Sept. - May	58	62																																																																																																																									
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June - August	66	70	X																																																																																																																								
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8.26.4 For Ohio River Main Stem(01) (Section 7.2.d.1)																																																																																																																											
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8.27 THRESHOLD ODOR:																																																																																																																											
Not to exceed a threshold odor number of 8 at 104°F as a daily average.	t.o.n.	X	X	X	X																																																																																																																						
8.28 TOTAL RESIDUAL CHLORINE:																																																																																																																											
Not to exceed 10 ug/l as measured by the amperometric or equivalent method.	ug/l	10	10	10																																																																																																																							

Section 8

SPECIFIC WATER QUALITY CRITERIA

USE DESIGNATIONS				
Warmwater B 1.5	Trotwater B 2	Recreation C	Public A	All C

PARAMETER	UNITS				
8.28.1 TOTAL RESIDUAL CHLORINE (Cont'd) No chlorinated discharge allowed.	—	—	X	—	—
.....					
8.28.2 The following chart may be used to derive the criteria instead of the above fixed (10 ug/l) figure:					
8.29 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's or less, or have more than a 10 percent increase in turbidity (plus 10 NTU minimum) when the background turbidity is more than 50 NTU's. This limitation shall apply to all earth disturbance activities and shall be determined					

Section 8

SPECIFIC WATER
 QUALITY CRITERIA

USE DESIGNATIONS

PARAMETER	UNITS	USE DESIGNATIONS				
		Watershed B 1.3	Troutwater B.2	Recreation C	Public A	All Other
8.29 TURBIDITY (Cont'd)						
by measuring stream quality directly above and below the area where drainage from such activity enters the affected stream. Any earth disturbance 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.	NTU's	X	X	X	X	
8.29.1						
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.	NTU's	X		X	X	
8.30 ZINC						
Hardness mg/l as CaCO ₃	Zinc ug/l					
0-150	50					
151-300	100					
301-400	300					
greater than 401	600				X	
8.30.1						
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					
greater than 401	600	ug/l	X			
8.30.2						
Not to exceed 47 ug/l.	ug/l		X			

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Leg. Rule, 20-5 & 20-5A
Series I, Sec. 8.29

Section 8

SPECIFIC WATER
QUALITY CRITERIA

USE DESIGNATIONS

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Leg. Rule, 20-5 & 20-5A

Series I, Sec. 9.

Section 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 as Category B1 and B2, 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 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:

9.2.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.

9.2.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:

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

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Leg. Rule, 20-5 & 20-5A

Series I, Sec. 9.3.b

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

9.3.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 the methodologies outlined in the following documents: EPA Ecological Research Series Publication, EPA-660/3/75/009; Methods of Acute Toxicity Tests With Fish, Macroinvertebrates, and Amphibians (April, 1975); Standard Methods for the Examination of Water and Wastewater (16th Edition); or Standard Method of Test for ASTM D1345-59 (Reapproved 1970) and published in the 1975 Annual Book of ASTM Standards - part 31 - Water; or EPA Environmental Monitoring Series Publication, EPA-600/4-78-013, Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (600/4-013) (3rd Edition February 1985). Test waters shall be reconstituted according to recommendations and methodologies specified in the previously cited references or methodologies approved in writing by the Chief.

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Leg. Rule, 20-5 & 20-5A

Series I, Appendix A

APPENDIX A
CATEGORY D-2 - TROUT WATERS

<u>River Basin</u>	<u>County</u>	<u>Stream</u>
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	Jefferson	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	"	Moore's 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

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Leg. Rule, 20-5 & 20-5A

Series I, Appendix A

PSB	Grant-	North Fork South Branch
	Pendleton	
PSB	Grant	North Fork Lunice Creek
PSB	"	South Fork Lunice Creek
PSB	"	South Mill Creek (Above Hiser)
PSB	"	Spring Run
PSB	Pendleton	Hawas Run (Impoundment)
PSB	"	Little Fork
PSB	"	South Branch (Above North Fork)
PSB	"	Senaca 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-	Whiteday Creek (Above Smithtown)
	Marion	
MC	Monongalia	Morgan Run
MC	"	Coopers Rock (Impoundment)
MC	"	Blaney Hollow
MC	Preston	Laurel Run
MC	"	Elsy 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)

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 Leg. Rule, 20-5 & 20-5A
 Series I, Appendix A

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	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)

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Leg. Rule, 20-5 & 20-5A

Series I, Appendix A

KE	Webster	Back Fork
KE	"	Desert Fork
KE	"	Fall Run
KE	"	Laurel Fork
KE	Pocahontas	Laurel Run
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	Nicholas	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	Greenbrier	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

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Leg. Rule, 20-5 & 20-5A
Series I, Appendix A

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
KNG	"	Little River-East Fork
KNG	"	Little River-West Fork
KNG	"	East Fork, Greenbrier River (above tannery reservoir)
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 B - WATER SUPPLY PUBLIC

<u>River Basin</u>	<u>County</u>	<u>Operating Company</u>	<u>Source</u>
Potomac River			
P	Jefferson	3-M Company	Turkey Run
P	"	Shepardstown Water	Potomac River
P	Jefferson	Harpers Ferry Water	Elk Run
P	Berkeley	DuPont Potomac River Works	Potomac River
P	Morgan	Paw Paw Water	Potomac River
PS	Jefferson	Charlestown Water	Evitt's Run
PSB	Hampshire	Romney Water	South Branch Potomac River
PSB	Hampshire	Peterkin Conference Center	Mill Run
PSB	Hardy	Moorefield Municipal Water	South Fork River
PSB	Pendleton	U.S. Naval Radio Sta.	South Fork River
PSB	Grant	Mountain 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	Mineral	Keyser Water	New Creek
PNB	"	Fort Ashby PSD	Lake
Monongahela River			
M	Monongalia	Morgantown Water Comm.	Colburn Creek & Monongahela R.
M	Monongalia	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

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MC	Monongalia	Cooper's Rock State Park	Impoundment
MC	Preston	Kingwood Water	Cheat River
MC	"	Hopemount State Hospital	Snowy Creek
MC	Preston	Rowlesburg Water	Keyser Run & Cheat River
MC	Preston	Albright Power Sta.	Cheat River
MC	Tucker	Parsons Water	Shavers & Elk Lick Fork
MC	Tucker	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	Tucker	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	Deacons & Hinkle Creek
MW	Harrison	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	"	Weston State Hospital	West Fork River
MW	"	Kennedy Compressor Station	West Fork River
MW	Lewis	Jane Lew Water Comm.	Hackers Creek
MW	Harrison	Bel-Meadow Country Club	Lake
MW	Harrison	Harrison Power Station	West Fork River
MW	Harrison	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	"	Eastern Assoc. Coal Corp.	Impoundment

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MT	Harrison	Shinnston Water Dept.	Tygart River
MT	Taylor	Taylor County PSD	Tygart Lake
MT	Barbour	Phillippi Water	Tygart River
MT	"	Bethlehem Mines Corp.	Impoundment
MT	Barbour	Belington Water Works	Tygart River & Mill Run Lake
MT	Randolph	Elkins Municipal Water	Tygart River
MT	"	Beverly Water	Tygart River
MT	"	Valley Water	Tygart River
MT	"	Huttonsville Medium Security Prison	Tygart River
MT	Randolph	Mill Creek Water	Mill Creek
MTB	Upshur	Buckhannon Water Board	Buckhannon River

Ohio River

O-1	Hancock	Chester Water & Sewer	Ohio River
O-1	Brooke	Weirton Steel Division	Ohio River
O-1	Ohio	Wheeling Water	Ohio River
O-1	Mason	Philip Sporn Plant	Ohio River
O-1	Tyler	Sistersville Municipal Water	Ohio River
O-1	Pleasants	Pleasants Power Station	Ohio River
O-1	Cabell	Huntington Water Corp.	Ohio River
O-1	Marshall	Mobay Chemical Co.	Ohio River
O-2	Marshall	Cameron Water	Glass House Hollow
O-2	Wetzel	Pine Grove Water	North Fork, Fishing Creek
O-2	Marshall	Consolidated Coal Co.	Impoundment
O-2	Tyler	Middlebourne Water	Middle Island Creek
O-2	Doddridge	West Union Municipal Water	Middle island Creek
O-2	Mason	Hidden Valley Country	Lake/Impoundment
O-2	Jackson	Ripley Water	Mill Creek
O-2	"	WV-FAA-FFA Camp	Cedar Lake
O-2	Wayne	Wayne Municipal Water	Twelve Pole Creek
O-2	Wayne	East Lynn Lake	East Lynn Lake
O-2	"	Monterey Coal Co.	Impoundment

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Little Kanawha

LK	Wood	Claywood Park PSD	Little Kanawha River
LK	Calhoun	Grantsville Municipal Water	Little Kanawha River
LK	Gilmer	Glenville Utility	Little Kanawha River
LK	Gilmer	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 River
LKH	Ritchie	Harrisville Water	North Fork Hughes River
LKH	Ritchie	Pennsboro Water	North Fork Hughes Fork

Kanawha River

K	Putnam	Buffalo Water	Cross Creek
K	"	Winfield Water	Poplar Fork & Crooked Creek
K	Putnam	South Putnam PSD	Poplar Fork & Crooked Creek
K	Kanawha	Cedar Grove Water	Kanawha River
K	"	Kanawha River Plant	Kanawha River
K	"	Pratt Water	Kanawha River
K	"	Community Water-Chelyan	Kanawha River
K	Fayette	Armstrong PSD PO-K1-CO-EL	Kanawha River & Gum Hollow
K	Fayette	Kanawha Water Co.-Beards Fork	Unnamed Tributary Kanawha River
K	Fayette	Midland Trail School	Impoundment
K	Kanawha	Rita's Motel	Kanawha River
K	"	Cedar Coal Co.	Impoundment
K	Fayette	Elkem Metals Co.	Kanawha River
K	"	Deepwater PSD	Kanawha River

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K	"	Kanawha Falls PSD	Kanawha River
K	"	Glen Ferris	Kanawha River
K	"	Boomer	Kanawha River
K	"	Charlton Heights	Kanawha River
K	"	W.V. Water-Montgomery	Kanawha River
K	"	Community Water Co.	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	Raleigh	Peabody Coal	Coal River
KC	"	Lake Stephens Park	Lake Stephens
KC	Boone	W.V. Water-Madison Dist.	Little Coal River
KC	Boone	Van PSD	Pond Fork
KC	Raleigh	Consol. Coal Co.	Workmans Creek

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	"	Prociuous PSD	Elk River
KE	"	Clinchfield Coal Co.	Fitzwater Run
KE	Braxton	Flatwoods-Canoe Run PSD	Elk River
KE	Braxton	Sugar Creek PSD	Elk River
KE	"	W.V. Water-Gassaway Dist.	Elk River
KE	Braxton	W.V. Water-Sutton District	Elk River
KE	Webster	W.V. Water-Webster Springs	Elk River

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KE	Webster	Holly River State Park	Holly River
Gauley River			
KG	Nicholas	Craigsville PSD	Gauley River
KG	"	Summersville Water	Impoundment/ Muddlety Creek
KG	Nicholas	Nettie-Leivasy PSD	Jim Branch
KG	Webster	Cowen PSD	Gauley River
KG	"	WV Baptist Camp	Gauley River
KG	Nicholas	Wilderness PSD	Anglins Creek & Meadow River
KG	"	Richwood Water	North Fork Cherry River
New River			
KN	Fayette	Ames Heights Water	Mill Creek
KN	"	Mt. Hope Water	Impounded Mine (Surface)
KN	Fayette	Ansted Municipal Water	Mill Creek
KN	"	Fayette Co. Park	Impoundments
KN	Fayette	Fayetteville Water	Wolfe Creek
KN	Raleigh	Beckley Water	Glade Creek
KN	"	Westmoreland Coal Co.	Farley Branch
KN	Fayette	Beckley Lick Run Co.	Lick Run
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	Mercer	Kelly's Tank	Spring
KNB	"	W.V. Water Princeton	Impoundment- Brush Creek
KNB	Mercer	Lashmeet PSD	Impoundment
KNB	"	W.V. Water Bluefield	Impoundment
Greenbrier River			
KNG	Summers	W.V. Water Hinton	Greenbrier River & New River

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KNG	"	Big Bend PSD	& New 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	Pocahontas	City of Marlinton Water	Knapp Creek
KNG	Pocahontas	Cass Scenic Railroad	Leatherbark Creek
KNG	Pocahontas	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	Logan	Logan PSD	Whitman Creek
OG	Mingo	Gilbert Water	Guyandotte River
OG	Wyoming	Oceana Water	Laurel Fork
OG	"	Pineville Water	Pinnacle Creek/ Guyandotte River
OG	Wyoming	Mullens Water Works	Slab Fork Creek
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	Mud River
OGM	Putnam	Lake Washington PSD	Lake Washington
Big Sandy River			
BS	Wayne	Kenova Municipal Water	Big Sandy River
BS	"	Bison Grill	Impoundment
BS	"	Fort Gay Water	Tug Fork
BST	Mingo	Kermit Water	Tug Fork
BST	"	Matewan Water	Tug Fork
BST	"	B & H Coal Co., Inc.	Impoundment
BST	"	Williamson Water	Impoundment

APPENDIX C

CATEGORY E-3 - POWER PRODUCTION

<u>River Basin</u>	<u>County</u>	<u>Station Name</u>	<u>Operating Company</u>
Monongahela River			
M	Monongalia	Fort Martin Sta.	Monongahela Power
M	Marion	Rivesville Sta.	Monongahela Power
MC	Preston	Albright Sta.	Monongahela Power
MW	Harrison	Harrison Sta.	Monongahela Power
Ohio River			
O-1	Marshall	Kamer	Ohio Power
O-1	"	Mitchell	" "
O-1	Pleasants	Pleasants Sta.	Monongahela Power
O-1	Pleasants	Willow Island Station	Monongahela Power
O-1	Mason	Phillip Sporn Plant	Central Operating (AEP)
O-1	Mason	Mountaineer	Appalachian Power Company
K	Putnam	Winfield (Hydro)	Appalachian Power Company
K	Kanawha	Marmet (Hydro)	Appalachian Power Company
K	Kanawha	London (Hydro)	Appalachian Power Company