

\$11.80

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BRIEFING DOCUMENT

Rule Title:

“Antidegradation Implementation Procedures,” 60CSR5

A. AUTHORITY:

W.Va. Code 22-11-7b(d)

B. SUMMARY OF RULE:

Antidegradation is a requirement of the federal Clean Water Act intended to preserve the existing quality of the State’s waters and to prevent and/or minimize future degradation. The rule was first adopted in 2001 and establishes four levels, or tiers, of protection for State waters, Tiers 1, 2, 2.5 and 3. Each tier provides a graduated level of protection used during the NPDES permit issuance process.

C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE:

The proposed revisions to the rule carry forward the agency’s antidegradation implementation efforts, and move the Tier 2.5 streams that had been on the “presumptive” list in Appendix C to a final proposed list in Appendix A, that is now subject to the legislative rulemaking review process, as clarified by passage of House Bill No. 4550 in the 2006 legislative session.

Changes have been made to the rule clarifying that the agency’s listing of streams on Appendix A is subject only to the legislative process and not the appellate process through the Environmental Quality Board. The Board will still hear appeals of certain final agency actions specified under section 9.6 of the rule, but will not hear appeals concerning the designation of Tier 2.5 waters.

Section 6.2 of the current rule has been largely deleted because it related to the procedures the Department was required to follow in reviewing the list of 444 streams that had initially been placed on the presumptive list for Tier 2.5 waters and making a final decision prior to legislative review. These procedures have recently been completed and thus the rule language is no longer necessary. The proposed rule states that the Tier 2.5 list is now in Appendix A and refers to the applicable sections for making subsequent additions or deletions to the list. These particular sections have also been amended to clarify the applicable public notice procedures and that the subsequent listing or delisting of Tier 2.5 waters is subject to legislative review.

The process for including streams in Appendix A included two separate opportunities for public comment and hearing. The agency has prepared a Responsiveness Summary to all of the public comments received, and a copy of this document is available at www.wvdep.org/antideg.

Other changes that have been proposed are cross-references to the Water Quality Standards rule (formerly 46CSR1, now 47CSR2) and other clerical corrections to the rule consistent with Senate Bill No. 278 that transferred all water quality standards authority to the Secretary from the Environmental Quality Board. One additional change was made to incorporate the same approach for determining significant degradation in Tier 2 waters as is currently established for Tier 2.5 waters. This change relates only to pH, fecal coliform, temperature and dissolved oxygen and reflects the fact that due to their nature, application of a percentage change in assimilative capacity is not an appropriate measure of degradation for these pollutants.

D. FEDERAL COUNTERPART REGULATIONS - INCORPORATION BY REFERENCE/DETERMINATION OF STRINGENCY:

Although the federal Clean Water Act requires the State to adopt implementation procedures related to the federal antidegradation policy, there is no direct federal counterpart regulation specifying the details of these procedures. Because there is no direct federal counterpart, no determination of stringency is required.

E. CONSTITUTIONAL TAKINGS DETERMINATION:

In accordance with §22-1A-1 and 3(c), the Secretary has determined that this rule will not result in taking of private property within the meaning of the Constitutions of West Virginia and the United States of America.

F. CONSULTATION WITH THE ENVIRONMENTAL PROTECTION ADVISORY COUNCIL:

At its meeting on May 31, 2006, the Environmental Protection Advisory Council discussed this rule. (See attached minutes for Council's discussion.)

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: Antidegradation Implementation Procedures, 60CSR5

Type of Rule: ☒ Legislative ☐ Interpretive ☐ Procedural

Agency: West Virginia Department of Environmental Protection

Address: 601 57th Street, SE
Charleston, WV 25304

Phone Number: (304) 926-0495 Email: lmcclung@wvdep.org

Fiscal Note Summary

Summarize in a clear and concise manner what impact this measure will have on costs and revenues of state government.

No fiscal impacts on state government are anticipated.

Fiscal Note Detail

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of Breakdown by fiscal year, including long-range effect.

FISCAL YEAR			
Effect of Proposal	Current Increase/Decrease (use "-")	Next Increase/Decrease (use "-")	Fiscal Year (Upon Full Implementation)
1. Estimated Total Cost	0.00	0.00	0.00
Personal Services	0.00	0.00	0.00
Current Expenses	0.00	0.00	0.00
Repairs & Alterations	0.00	0.00	0.00
Assets	0.00	0.00	0.00
Other	0.00	0.00	0.00
2. Estimated Total Revenues	0.00	0.00	0.00

Rule Title: _____

Rule Title:

Antidegradation Implementation Procedures, 60CSR5

3. Explanation of above estimates (including long-range effect):

Please include any increase or decrease in fees in your estimated total revenues.

None anticipated

MEMORANDUM

Please identify any areas of vagueness, technical defects, reasons the proposed rule would not have a fiscal impact, and/or any special issues not captured elsewhere on this form.

The proposed revisions carry forward the agency's implementation efforts, and costs of implementing the changes will be absorbed in the agency's current budget.

Date: May 31, 2006

Signature of Agency Head or Authorized Representative

TITLE 60
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SECRETARY'S OFFICE

FILED

SERIES 5
ANTIDEGRADATION IMPLEMENTATION PROCEDURES

16 MAY 31 P 2:04

OFFICE WEST VIRGINIA
SECRETARY OF STATE

§60-5-1. General.

1.1. Scope. -- This rule establishes the procedures by which the Department of Environmental Protection shall implement the State's water quality anti-degradation policy found at ~~46 CSR 1-4~~, 47 CSR 2-4.

1.2. Authority. -- W. Va. Code §§~~22-11-7b~~ (a)&(b) §22-11-7b(d). ~~House Bills 3240 and 2663.~~

1.3. Filing Date. -- ~~July 19, 2002.~~

1.4. Effective Date. -- ~~July 19, 2002.~~

1.5. Applicability

1.5.a. Except as noted, the antidegradation implementation procedures herein apply to regulated activities that have the potential to affect water quality. The level of review required will depend upon the existing uses of the water segment that would be affected, the level of protection ("tier") assigned to the applicable water segment, the nature of the activity, and the extent to which existing water quality would be degraded.

1.5.b. Nonpoint source activities will be deemed to be in compliance with antidegradation requirements with the installation and maintenance of cost-effective and reasonable best management practices in accordance with ~~46 CSR 1-4.1.b.~~ 47 CSR 2-4.1.b. herein. These include, but are not limited to, best management practice programs for silviculture administered by the Division of Forestry, programs for oil and gas operations administered by the Office of Oil and Gas of the Department of Environmental Protection, nonpoint source construction activities, and reasonable land, soil and water conservation measures and practices applied to

agricultural nonpoint sources.

1.5.c. Where applicable and practical, the antidegradation procedure and review shall be integrated into and proceed concurrently with existing environmental processes and reviews pursuant to the National Environmental Policy Act.

1.5.d. Information contained within existing environmental processes and reviews, such as environmental assessments, environmental impact statements, facilities plans, and findings of no significant impact, may be used to provide part or all of the requirements of the antidegradation procedure and review.

§60-5-2. Definitions.

2.1. For purposes of this rule the term "agency" or "agencies" refers to the Department of Environmental Protection or other federal, state, or local governmental entities with regulatory authority over activities that may affect water quality.

2.2. For purposes of this rule the term "regulated entity" refers generally to any regulated entity that affects or is proposing an activity that will affect water quality. For example, an applicant for a WV/NPDES permit, a WV/NPDES permit holder, or an owner or operator of an activity that discharges pollutants into a water of the state would be a regulated entity.

2.3. For purposes of this rule the term "minimum uses" refers to recreation and wildlife and the propagation and maintenance of fish and other aquatic life.

2.4. For purposes of this rule the term "Secretary" refers to the Secretary of the

Department of Environmental Protection or its successor.

2.5. For purposes of this rule references to the "Board" or "EQB" mean the West Virginia Environmental Quality Board.

2.6. For purposes of this rule the definitions contained in ~~46 CSR 1-2~~ 47 CSR 2-2 effective ~~May 17, 2001~~ June 1, 2006 are hereby incorporated herein.

§60-5-3. Antidegradation Review Process.

3.1. As set forth in ~~46 CSR 1-4.1~~ 47 CSR 2-4.1, the State's antidegradation policy requires that existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. This requirement applies to all waters of the state.

3.2. Except where a water segment is specifically listed as a Tier 2.5 or Tier 3 water, the following sections outline how the agency conducting the antidegradation review will determine the level of protection ("tier") assigned to the receiving water body associated with the activity subject to this rule.

3.3. Uses. The Secretary, in conducting an antidegradation review, must determine the existing uses of the receiving water body associated with the proposed activity. The Secretary shall determine the existing uses of the water body by identifying the uses set forth in ~~46 CSR 1-Section 6~~ 47 CSR 2-6 that the water body currently supports, or has supported since November 28, 1975. The regulated entity may be required to provide data sufficient for the permitting agency to determine the existing uses of the water segment.

3.4. Baseline water quality. Where baseline water quality has not been established for the water segment the regulated entity proposes to impact or has not been established for a parameter of concern that is reasonably expected to be discharged into the water segment as a result of the proposed regulated activity, the Secretary must determine the baseline water quality for the receiving water body. The Secretary may consider data for establishing the baseline water quality from a federal or state agency, the

regulated entity, the public, or any other source, as long as the data are recent and reliable. If adequate data are not available, the agency may, in conjunction with the regulated entity or on its own initiative, establish a plan for obtaining the necessary data. The regulated entity may be required to provide baseline water quality for those parameters of concern that are reasonably expected to be discharged as a result of the regulated activity into the affected water segment to help the permitting agency determine the baseline water quality, the existing uses, and the applicable tier. The regulated entity may contact the Secretary prior to initiating a baseline water quality evaluation to seek concurrence with its determination of the parameters of concern for its proposed activity and its proposed sampling protocol.

3.5. Determination of tier. If the tier has not already been determined for the water segment the regulated entity proposes to impact, then after determining the baseline water quality for parameters of concern and the existing uses for a water body, the agency will determine which level of protection (i.e. "tier") applies to the receiving water body associated with the activity, as follows:

3.5.a. Water segments listed in Appendix A of this rule shall receive Tier 2.5 protection.

3.5.b. Water segments within a federally designated Wilderness Area, as well as other water segments specifically listed ~~in this rule~~ as an outstanding national resource water pursuant to subsection 8.2 shall receive Tier 3 protection.

3.5.c. Water segments not within a federally designated Wilderness Area, not listed pursuant to subsection 8.2 and not listed in Appendix A of this rule shall receive Tier 1 protection, and shall receive Tier 2 protection if the water segment is determined, pursuant to subsections 5.1. through 5.3. of this rule, to be a high quality water for purposes of antidegradation review.

3.5.d. Water segments may be determined to receive only Tier 1 protection, pursuant to subsections 4.2. through 4.6. of this rule, for purposes of antidegradation review.

3.5.e. To the extent practicable, a list of water segments protected under Tier 2.5 or Tier 3 will be maintained on the West Virginia Department of Environmental Protection's website.

3.6. Level of review. Once the correct level of protection ("tier") and water segment use(s) are identified for the receiving water body, the agency shall document its findings and proceed with the appropriate level of antidegradation review.

3.7. On or after July 2, 2001, the effective date of these implementation procedures, new and reissued WV/NPDES general permits will be evaluated to consider the potential for significant degradation as a result of the permitted activity. Regulated activities that are granted coverage by a WV/NPDES general permit will not be required to undergo a Tier 2 antidegradation review as part of the permit registration process. Regulated activities that are granted coverage by a WV/NPDES permit that will degrade a Tier 2.5 or Tier 3 water segment must comply with the requirements of sections 6 and 7 herein.

3.8. Regulated activities that qualify for coverage under a Corps of Engineers regional or nationwide permit pursuant to section 404 of the Federal Act that has been certified by the state pursuant to section 401 of the Federal Act will not be required to undergo a Tier 2 antidegradation review, provided, however, that where an individual 401 certification is required, the Secretary may require an appropriate antidegradation review. Where an activity covered by a regional or nationwide permit pursuant to section 404 of the Federal Act and certified pursuant to section 401 of the Federal Act allows for filling of a water, this exemption only applies to the site of the fill, and does not apply to activities downstream of the site of the fill. Regulated activities that are granted section 401 certification that will degrade a Tier 2.5 or Tier 3 water segment must comply with the requirements of sections 6 and 7 herein.

3.9. The Secretary shall develop guidance which addresses these implementation procedures and provides additional information to persons conducting regulated activities that are affected by these procedures. Such guidance shall include, but shall not be limited to, information regarding

the following: (a) the determination of baseline water quality; (b) social and economic importance pursuant to subsection 5.8; and (c) the reasonable alternatives analysis required by subsection 5.7. The Secretary shall provide an opportunity for public review and comment before finalizing any guidance. ~~Within twelve months of the effective date of this rule, the Secretary shall report to the advisory committee established pursuant to W. Va. Code §22-1-9 regarding the status of its implementation.~~

§60-5-4. Tier 1 Protection.

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

4.2. Tier 1 protection applies to all waters of the state. A water segment shall be afforded Tier 1 protection where the level of water quality is not sufficient to support recreation and wildlife and the propagation and maintenance of fish and other aquatic life, or where the water quality meets but does not exceed levels necessary to support recreation and wildlife and the propagation and maintenance of fish and other aquatic life.

4.3. In determining whether a water segment is afforded only Tier 1 protection, the agency will focus on whether the water segment is meeting or failing to meet minimum uses, except that, notwithstanding any other provision of this rule, the main stems of the Monongahela River, and the Kanawha River from milepoint 72 to the confluence with the Ohio River shall be afforded Tier 1 protection only.

4.4. The Secretary will consider whether a water segment is listed on the state's 303(d) impaired waters list, but where the parameter(s) for which the water segment is listed does not result in that water segment's failure to attain minimum uses and where all other parameters exceed the quality necessary to support recreation and wildlife and the propagation and maintenance of fish and other aquatic life, the water segment will be afforded Tier 2 protection. Where the parameter(s) for which the water segment is listed does result in failure to attain minimum uses, such as an acid mine drainage-impacted water segment, that water segment will be afforded only Tier 1 protection.

4.5. All water segments listed on the state's 303(d) impaired waters list will be afforded only Tier 1 protection for the parameter(s) that resulted in the water segment being listed.

4.6. There also may be waters in the state where one or both of the fishable/swimmable uses are attained, but existing water quality is not "better than necessary" to support those uses (i.e., assimilative capacity does not exist for any of the parameters that would be affected by the proposed activity). Tier 1 protection is appropriate for such a water segment.

4.7. Where existing uses of the water body are impaired, there shall be no lowering of the water quality with respect to the parameters of concern that are causing the impairment. The agency shall consider nomination of such water body for the 303(d) list of water quality-impaired streams.

4.8. Where a proposed activity will result in a new or expanded discharge that would otherwise prevent attainment of an existing use in a water subject to Tier 1 protection, the applicant may be allowed to satisfy antidegradation review requirements by implementing or financing upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity from the same parameters and insure an improvement in water quality as a result of the trade. The basis of the trade will be documented and will be consistent with the trading assessment procedure that has been approved by the Secretary. A trade may be made between more than one stream segment where removing a discharge in one stream segment directly results in improved water quality in another stream segment. In addition, (1) the effluent trade must be for the same parameter; (2) where uncertainty exists regarding the effluent trade, an adequate margin of safety will be required; (3) dischargers cannot claim offsets for water quality improvements that are required or will occur irrespective of the proposed new or expanded discharge; and (4) the trade must be enforceable.

§60-5-5. Tier 2 Protection (High Quality Waters).

5.1. A water segment shall be considered a

Tier 2 high quality water where the level of water quality exceeds levels necessary to support recreation and wildlife and the propagation and maintenance of fish and other aquatic life.

5.2. Tier 2 waters need not exceed the level of quality needed to meet or exceed numeric criteria for every parameter. Water segments that support the minimum fishable/swimmable uses and have assimilative capacity remaining for some parameters shall generally be afforded Tier 2 protection. For example, a water segment listed on the state's 303(d) impaired waters list can qualify for Tier 2 protection, but where the impairment that caused the water segment to be listed results in failure to attain minimum uses, that water segment will be afforded only Tier 1 protection.

5.3. Where a water segment does not meet or exceed applicable water quality criteria for every parameter, the Secretary will determine whether the water segment will be afforded Tier 2 protection as part of the antidegradation review process using best professional judgment. In addition to data available for review, the Secretary may consider factors such as (1) existing aquatic life uses, (2) existing recreational or aesthetic uses, (3) existing water quality data for upstream segments or comparable segments, (4) biological score for the water segment, and (5) the overall value of the segment from an ecological, health and public use perspective.

5.4. Where insufficient information is available to determine which tier should apply, a regulated entity may seek a determination that a water segment should be afforded only Tier 1 protection by submitting water quality data consistent with guidance developed pursuant to subsection 3.9. of this rule showing that there is no remaining assimilative capacity for any parameter to be affected by its activity. In seeking such a determination, the impacts of all of the regulated entity's activities on the water segment must be considered.

5.5. Where there is insufficient information to establish which tier should apply, it is the intent of these procedures to apply Tier 2 protection to such waters until such time as sufficient water quality data is obtained to determine the appropriate level of protection. No presumption

shall be made with regard to the actual quality of any waters as a result of such initial application.

5.6. Tier 2 antidegradation review.

5.6.a. Any regulated activity in a Tier 2 water segment is required to go through the Tier 2 antidegradation review process where:

5.6.a.1. The regulated activity is a new or expanded activity that would significantly degrade water quality; or

5.6.a.2. The Secretary determines, upon renewal of a permit or certification, that other individual circumstances warrant a full review such as cumulative degradation resulting from multiple discharges within a watershed, degradation resulting from a single discharge over time, or degradation caused by a regulated facility's historic noncompliance with its permit.

5.6.b. In allowing any degradation, the agency shall assure water quality adequate to protect existing uses fully (i.e., Tier 1 protection).

5.6.c. The Secretary may determine that certain types or classes of activities should be exempt from Tier 2 review after balancing the relative impact of the activities on water quality against the overall benefit of the activities to public health and welfare or the environment. The Secretary's discretion to exempt activities from review pursuant to this section shall be exercised and construed narrowly. Such types or classes of activities may include, for example, expansions or improvements to publicly owned wastewater treatment facilities or activities, public benefit activities by governmental entities, or discharges related to environmental remediation activities. Where the agency tentatively determines to grant an exemption under this provision, notice of this determination must be included in any required public notice, such as public notice required prior to issuance of an NPDES permit. The Secretary's final determination is a final decision and subject to appeal to the Environmental Quality Board. A proposed new or expanded discharge from a publicly owned or publicly owned and privately operated sanitary wastewater treatment plant constructed or operated to alleviate a public health concern associated with failing septic systems or

untreated or inadequately treated sewage, is exempt from Tier 2 review. This exemption would include combined sewer overflow elimination or reduction projects affecting one or more water bodies and applies only where there will be a net decrease in the overall pollutant loading discharged to the combined receiving waters.

5.6.d. Degradation for Tier 2 shall be deemed significant if the activity results in a reduction in the water segment's available assimilative capacity (the difference between the baseline water quality and the water quality criteria) of ten percent or more at the appropriate critical flow condition(s) for parameters of concern. Critical flow conditions for non-precipitation induced discharges are the 7Q10 flow of the receiving stream, plus either of the following: maximum permitted flow or maximum flow specified in the application, for industrial activities, or the average design flow, for wastewater treatment activities. Degradation will also be deemed significant if the proposed activity, together with all other activities allowed after the baseline water quality is established, results in a reduction in the water segment's available assimilative capacity of 20% or more at the appropriate critical flow conditions for the parameters of concern: , except that discharges affecting dissolved oxygen, pH, fecal coliform or temperature will be deemed insignificant provided that:

5.6.d.1. For dissolved oxygen, the maximum DO sag will not be greater than 0.4 ppm based on an appropriate wasteload allocation model, unless that reduction is projected to cause a violation of 47 CSR 2-8.12 through 8.12.3, Appendix E, Table 1;

5.6.d.2. pH is maintained within the 6.0 to 9.0 range;

5.6.d.3. Thermal discharges will be consistent with 316(a) of the Federal Act or will not increase the temperature more than two degrees Fahrenheit at any time or cause other violations of applicable criteria in 47 CSR 2-8.28 through 8.28.4, Appendix E, Table 1.

5.6.d.4. For fecal coliform, necessary and appropriate treatment (disinfection) or control

is required and the fecal coliform concentrations are established as 200/100 ml monthly average and 400/100 ml daily maximum.

5.6.e. Significant degradation will be determined on a parameter-by-parameter basis for each parameter of concern that might be affected by the regulated activity.

5.6.f. A proposed activity that will result in a new or expanded discharge in a water subject to Tier 2 protection may be allowed where the applicant agrees to implement or finance upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity from the same parameters and insure an improvement in water quality as a result of the trade. The basis of the trade will be documented and will be consistent with the trading assessment procedure that has been approved by the Secretary. A trade may be made between more than one stream segment where removing a discharge in one stream segment directly results in improved water quality in another stream segment. In addition, (1) the effluent trade must be for the same parameter; (2) where uncertainty exists regarding the effluent trade, an adequate margin of safety will be required; (3) dischargers cannot claim offsets for water quality improvements that are required or will occur irrespective of the proposed new or expanded discharge; and (4) the trades must be enforceable.

5.6.g. New or expanded activities determined to be significant by the agency shall be subject to the Tier 2 review requirements described in subsections 5.6. through 5.9. herein. If the agency determines that no further Tier 2 review requirements shall apply for an activity, the activity must still achieve the highest established statutory and regulatory requirements applicable to them, or conditions of the permit, or water quality certification, and that determination must be made a part of the public notification, as provided in subsections 9.1 through 9.5.

5.7. Review of alternatives.

5.7.a. If a determination is made that significant degradation will occur, the agency shall determine whether reasonable and cost effective less-degrading or non-degrading alternatives to the proposed activity exist. The

agency will evaluate any alternatives analysis submitted by the regulated activity for consistency with the requirements set forth in Subdivision 5.7.b. herein.

5.7.b. A regulated entity proposing any new or expanded regulated activity that would significantly degrade water quality in a high quality water is required to prepare an evaluation of alternatives to the proposed activity. The evaluation must provide substantive information pertaining to the cost and environmental impacts associated with the following alternatives:

5.7.b.1. Pollution prevention measures;

5.7.b.2. Reduction in scale of project;

5.7.b.3. Water recycle or reuse;

5.7.b.4. Process changes;

5.7.b.5. Innovative treatment technology or technologies;

5.7.b.6. Advanced treatment technology or technologies;

5.7.b.7. Seasonal or controlled discharge options to avoid critical water quality periods;

5.7.b.8. Improved operation and maintenance of existing treatment systems; and

5.7.b.9. Alternative discharge locations.

5.7.c. After alternatives to allowing degradation have been adequately evaluated, a determination shall be made regarding whether cost-effective and reasonable non-degrading or less-degrading alternatives to the proposed activity shall be required. This determination will be based primarily on the alternatives analysis developed by the regulated entity, but may be supplemented with other information and data. As a rule of thumb, cost effective and reasonable non-degrading or less-degrading pollution control alternatives with costs that are less than 110% of the costs of the pollution control measures associated with the proposed activity shall be

considered reasonable.

5.7.d. If it is determined that reasonable and cost effective less degrading or non-degrading alternatives to the proposed activity do exist, the project design may be revised accordingly. In general, if reasonable alternative(s) exist, the alternative or combination of alternatives that provide the least amount of degradation shall be implemented up to the determined reasonable and cost-effective threshold. If the regulated entity does not agree to adopt such reasonable and cost-effective alternatives, the alternatives analysis findings will be documented and the activity will not be allowed.

5.8. Review of social and economic importance.

5.8.a. If significant degradation would occur, even after application of reasonable less-degrading or non-degrading alternatives, a determination shall be made as to whether the proposed activity is necessary to accommodate important economic or social development in the area in which the waters are located.

5.8.b. The regulated activity must document the social and economic importance of the proposed activity.

5.8.c. The factors to be addressed in such documentation may include, but are not limited to, the following:

5.8.c.1. Employment (e.g., increasing, maintaining or avoiding a reduction in employment);

5.8.c.2. Increased production;

5.8.c.3. Improved community tax base;

5.8.c.4. Housing;

5.8.c.5. Ancillary community economic benefit; and

5.8.c.6. Correction of an environmental or public health problem.

5.8.d. In addition to the above, a

regulated entity may be required to submit the following:

5.8.d.1. Information pertaining to current aquatic life, recreational, or other water uses;

5.8.d.2. Information necessary to determine the environmental impacts that may result from the proposed activity;

5.8.d.3. Facts pertaining to the current state of economic development in the area (e.g., population, area employment, area income, major employers, types of businesses);

5.8.d.4. Government fiscal base; and

5.8.d.5. Land use in the areas surrounding the proposed activity.

5.8.e. Once the available information pertaining to the socio-economic importance of the proposed activity has been reviewed by the agency, a preliminary determination regarding importance shall be made. In evaluating the regulated activity's demonstration of socio-economic importance, the agency may use EPA's Interim Economic Guidance for Water Quality Standards Workbook (EPA 823-B-95-002, March, 1995). Where there is a request for a variance from groundwater standards pursuant to 47 CSR 57 for existing sites where activities on those sites have the potential to impact surface water from contaminated groundwater and the activity is otherwise subject to this rule, the socio-economic justification process required under 47 CSR 57 subdivision 6.2.i will satisfy the requirements of this section. If the proposed activity is determined to have social or economic importance in the area in which the affected waters are located, the substance and basis for that preliminary determination shall be documented and the Tier 2 review shall continue.

5.9. Intergovernmental coordination for Tier 2 reviews.

5.9.a. The intergovernmental coordination requirements in ~~46 CSR 1-4.1.b.~~ 47 CSR 2-4.1.b. will be accomplished by providing notice to those agencies listed in Appendix B that the Secretary believes may have regulatory

oversight of the regulated activity of the preliminary determination of the socio-economic review and requesting comments from those agencies regarding that review.

5.9.b. The public notice of the proposed activity will be provided as set forth in subsections 9.1 through 9.5 herein.

5.9.c. Once the intergovernmental coordination and public notice requirements are satisfied, the Secretary shall make a final determination concerning the social or economic importance of the proposed activity. All social and economic importance determinations, including determinations to prohibit the activity, shall be documented and made a part of the public record.

§60-5-6. Tier 2.5 Protection Review Procedures (Waters of Special Concern). See ~~46 CSR 1-4.1.c~~ 47 CSR 2-4.1.c, and ~~46 CSR 1-2.29~~ 47 CSR 2-2.19 for a description and definition of Waters of Special Concern.

6.1. Any proposed activity that would degrade a water segment listed in Appendix A of this rule as waters of special concern will go through the Tier 2.5 antidegradation review process. Discharges from publicly-owned or publicly-owned and privately operated sanitary wastewater treatment plants that expand to alleviate a public health concern associated with failing septic systems or untreated or inadequately treated sewage, shall be permissible in a Tier 2.5 water segment where there will be a net decrease in the overall pollutant loading discharged to the combined receiving waters: Provided, That less degrading alternative treatment technologies are considered and used where costs for such technologies are within budgets and rates approved for such expansion project. This provision may extend to combined sewer overflow elimination or reduction projects. ~~Except as provided in subdivisions 6.2.a. and b. of this rule, the listing procedure for Tier 2.5 waters is set forth in section 8.1. herein. Currently listed Tier 2.5 waters are included in Appendix A to this rule.~~

6.2. Initial Presumptive Listing for Tier 2.5.

6.2.a. The stream or stream segments that

~~appear on Appendix C shall be presumed to qualify as Tier 2.5 waters. Before any such stream or stream segment is protected as Tier 2.5 waters (and listed on Appendix A) the Secretary shall do the following:~~

~~6.1.a.1. Assure compliance with all provisions of article one-a of chapter twenty-two; and~~

~~6.1.a.2. No sooner than six months and no later than twelve months from the effective date of this rule, provide, where practicable, individual notice to property owners along such stream or stream segment. In addition, notice by publication shall be provided to all property owners and others with a legal interest in the property. The notice shall include at a minimum, the information set forth in subparagraphs 8.1.a.1.A. through 8.1.a.1.D. of this rule. The notice shall indicate that a property owner or holder of legal interest in the property shall have thirty days to file an objection to the inclusion of the stream or stream segment as a Tier 2.5 water.~~

~~6.2.b. Should an objection be received from an owner or holder of a legal interest in property adjoining any stream on Appendix C, the Secretary shall provide written justification for the inclusion of the stream as a Tier 2.5 stream with reference to the criteria set out in paragraph 8.1.a.2. of this rule. The Secretary shall then provide a thirty-day comment period on the proposed action:~~

~~6.2.b.1. Where no objection is made to the inclusion of a stream or stream segment as a Tier 2.5 water, the stream shall be included by the Secretary on Appendix A without further justification:~~

~~6.2.b.2. Any final decision by the Secretary with regard to the inclusion of a stream in Tier 2.5 made following the procedure set forth in this paragraph, may be appealed to the EQB. For those streams for which the Secretary receives an objection to inclusion of the stream as a Tier 2.5 stream, the Secretary shall make a decision whether to include the stream on the initial listing on Appendix A and shall provide a written justification for the decision:~~

6.2.c. Following the initial listing for Tier

~~2.5 waters, as described in subdivisions 6.2.a. and b. above, subsequent additions or deletions from Appendix A shall be in accordance with section 8.1., herein:~~

6.2. Currently listed Tier 2.5 waters are included in Appendix A to this rule. Subsequent additions or deletions from Appendix A shall be in accordance with subsection 8.1.

6.3. Tier 2.5 antidegradation review.

6.3.a. No significant degradation of Tier 2.5 waters will be allowed. For Tier 2.5 waters, degradation will be deemed significant if it exceeds the baseline water quality plus ten percent of available assimilative capacity (the difference between the baseline water quality and the water quality criteria), whether from a single activity or cumulatively, except that discharges affecting dissolved oxygen, pH, fecal coliform or temperature will be deemed insignificant provided that:

6.3.a.1. For dissolved oxygen, the maximum DO sag will not be greater than 0.4 ppm based on an appropriate wasteload allocation model, unless that reduction is projected to cause a violation of ~~46 CSR 1-8.12 through 8.12.3~~, 47 CSR 2-8.12 through 8.12.3, Appendix E, Table 1;

6.3.a.2. pH is maintained within the 6.0 to 9.0 range;

6.3.a.3. Thermal discharges will be consistent with 316(a) of the Federal Act or will not increase the temperature more than two degrees Fahrenheit at any time or cause other violations of applicable criteria in ~~46 CSR 1-8.28 through 8.28.4~~ 47 CSR 2-8.28 through 8.28.4, Appendix E, Table 1.

6.3.a.4. For fecal coliform, necessary and appropriate treatment (disinfection) or control is required and the fecal coliform concentrations are established as 200/100 ml monthly average and 400/100 ml daily maximum.

6.3.b. Where a Tier 2.5 water has one or more parameters that fail to meet water quality criteria, the Secretary shall use best professional judgment in setting appropriate limitations for such parameters, with the goal of improving

baseline water quality for such parameters over time.

6.3.c. Where baseline water quality has not been established for the Tier 2.5 water segment for a parameter of concern that is reasonably expected to be discharged into the water segment as a result of a new or expanded regulated activity, a determination of the baseline water quality for the receiving water segment must be established for that parameter of concern prior to allowing any new or expanded discharge.

6.3.d. The Secretary may consider data for establishing the baseline water quality from a federal or state agency, the regulated entity, the public, or any other source, as long as the data are recent and reliable. The regulated entity may be required to provide baseline water quality for those parameters of concern that are reasonably expected to be discharged as a result of the regulated activity into the affected water segment.

6.3.e. After the baseline water quality has been established for the parameters of concern reasonably expected to be discharged by the proposed activity, the de facto criteria for those parameters of concern will equal the established baseline water quality plus ten percent of available assimilative capacity.

6.3.f. Regulated entities with discharges existing on or before July 2, 2001, the effective date of this rule, that discharge into a Tier 2.5 water may be required to submit an alternatives analysis upon renewal of its application or upon the written request of the Secretary to evaluate reasonable and cost-effective alternatives that would reduce the activity's impact to a Tier 2.5 water.

6.3.g. Discharges from activities in waters upstream of a water of special concern shall not result in the ambient water quality within the Tier 2.5 water exceeding the *de facto* criteria.

6.3.h. A proposed activity that will result in a new or expanded discharge in a water subject to Tier 2.5 protection may be allowed where the applicant agrees to implement or finance upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity from the same parameters and insure an

improvement in water quality as a result of the trade. The basis of the trade will be documented and will be consistent with the trading assessment procedure that has been approved by the Secretary. A trade may be made between more than one stream segment where removing a discharge in one stream segment directly results in improved water quality in another stream segment. In addition, (1) the effluent trade must be for the same parameter; (2) where uncertainty exists regarding the effluent trade, an adequate margin of safety will be required; (3) dischargers cannot claim offsets for water quality improvements that are required or will occur irrespective of the proposed new or expanded discharge; and (4) the trades must be enforceable.

6.3.i. If a determination is made that the activity will result in significant degradation of a Tier 2.5 water, the activity shall not be allowed.

6.3.j. If the activity is determined not to result in significant degradation of a Tier 2.5 water, the activity may be allowed. In such case the antidegradation review findings will be documented in writing and public notice activities will be initiated consistent with subsections 9.1 through 9.5 herein.

6.3.k. Short-term water quality impacts. The Secretary shall determine whether a proposed activity is short term in nature and the resulting changes in water quality will be temporary and have limited effects. Notwithstanding subdivisions 6.3.a. and 6.3.e. herein, short-term activities which result in less than a 10% change in the available assimilative capacity may be deemed to have limited effects. Determinations will be made on a case-by-case basis and shall be made after consideration of the following factors:

6.3.k.1. The length of time during which the water quality will be lowered;

6.3.k.2. The percent change in ambient concentrations;

6.3.k.3. The parameters affected;

6.3.k.4. The likelihood for long-term water quality benefits to the segment (e.g., as may result from dredging of contaminated sediments);

6.3.k.5. The degree to which achieving applicable water quality standards during the proposed activity may be at risk;

6.3.k.6. The potential for any residual long-term influences on existing uses; and

6.3.k.7. The cumulative impacts from all sources for the parameters affected.

§60-5-7. Tier 3 Protection Review Procedures (Outstanding National Resource Waters). See ~~46 CSR 1-4.1.d and 46 CSR 1-2.15~~ 47 CSR 2-4.1.d and 47 CSR 2-2.9 for a description of Outstanding National Resource Waters (ONRW).

7.1. Tier 3 waters. ONRWs are to be maintained, protected and improved where necessary. Any proposed new or expanded regulated activity that would degrade (result in a lowering of water quality) a water body that has been ~~approved as~~ designated an ONRW, other than temporary lowering of water quality, is prohibited.

7.2. Tier 3 antidegradation review. The agency shall use the following antidegradation implementation procedures for evaluating new or expanded regulated activities that have the potential to affect Outstanding National Resource Waters (ONRWs), as described in ~~46 CSR 1-4.1.c; 47 CSR 2 - 4.1.d~~, and as ~~nominated and approved listed~~ in accordance with ~~the provisions of this rule.~~ subsection 8.2.

7.2.a. Determine whether the proposed activity is short term in nature and the resulting changes in water quality will be temporary. Such determination will be made on a case-by-case basis and shall be made after consideration of the following factors:

7.2.a.1. The length of time during which the water quality will be lowered;

7.2.a.2. The percent change in ambient concentrations;

7.2.a.3. The parameters affected;

7.2.a.4. The likelihood for long-term water quality benefits to the segment (e.g., as may

result from dredging of contaminated sediments);

7.2.a.5. The degree to which achieving applicable water quality standards during the proposed activity may be at risk; and

7.2.a.6. The potential for any residual long-term influences on existing uses.

7.2.b. If after review of the factors in paragraphs 7.2.a.1 through 7.2.a.6, the agency determines that the proposed activity will be short term in nature and the changes in water quality will be temporary and limited, the proposed activity may be authorized. In such case the antidegradation review findings shall be documented and public notice activities shall be initiated. If after review of the factors in paragraphs 7.2.a.1 through 7.2.a.6, the agency determines that the proposed activity will not be short term in nature or that changes in water quality will not be temporary and limited, the proposed activity shall be denied.

7.3. Sources upstream from an ONRW. Any proposed activity that would result in a permanent new or expanded discharge upstream of an ONRW segment is prohibited except where such source would improve or not degrade the existing water quality of the downstream ONRW segment.

7.3.a. To determine whether the proposed activity will result in the lowering of water quality in the downstream ONRW segment, the following factors, when applicable, shall be considered:

7.3.a.1. Change in ambient concentrations predicted at the appropriate critical condition(s);

7.3.a.2. Change in loadings (i.e., the new or expanded loadings compared to total existing loadings to the segment);

7.3.a.3. Reduction in available assimilative capacity;

7.3.a.4. Nature, persistence and potential effects of the parameter;

7.3.a.5. Potential for cumulative effects;

7.3.a.6. Degree of confidence in the various components of any modeling technique utilized (e.g., degree of confidence associated with the predicted effluent variability); and

7.3.a.7. Other factors determined by the Secretary, when appropriate.

7.3.b. If a preliminary determination is made that the applicable criteria in paragraphs 7.3.a.1. through 7.3.a.7. will be met, the antidegradation review findings shall be documented and the applicable public notice activities shall be initiated. If after review of the factors in paragraphs 7.3.a.1. through 7.3.a.7., the Secretary determines that the proposed activity will result in the lowering of water quality in the downstream ONRW stream segment, the proposed activity shall be denied.

7.4. For ONRWs in areas designated as federal Wilderness, nothing in this rule is intended to authorize activities not authorized by the Wilderness Act.

7.5. A proposed activity that will result in a new or expanded discharge in a water subject to Tier 3 protection may be allowed where the applicant agrees to implement or finance upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity from the same parameters and insure an improvement in water quality as a result of the trade. The basis of the trade will be documented and will be consistent with the trading assessment procedure that has been approved by the Secretary. A trade may be made between more than one stream segment where removing a discharge in one stream segment directly results in improved water quality in another stream segment. In addition, (1) the effluent trade must be for the same parameter; (2) where uncertainty exists regarding the effluent trade, an adequate margin of safety will be required; (3) dischargers cannot claim offsets for water quality improvements that are required or will occur irrespective of the proposed new or expanded discharge; and (4) the trade must be enforceable.

§60-5-8. Designation of Tier 2.5 and Tier 3 Waters.

8.1. Listing process for Tier 2.5.

8.1.a. Tier 2.5 Nomination Procedures. Any interested party or the Board Secretary may nominate a water to be listed as a Water of Special Concern. After reviewing the nomination the Board Secretary shall consider the qualification criteria and may designate the nominated water as a Tier 2.5 water in accordance with the ~~notice and comment provisions of 46 CSR-6, Procedural Rules Governing Site Specific Revisions to Water Quality Standards. legislative rulemaking process pursuant to W.Va. Code § 29A-3-1 et seq.~~ The address for filing such petitions is ~~West Virginia Environmental Quality Board, 1615 Washington Street, East, Room 301, Charleston, West Virginia 25311-2126. West Virginia Department of Environmental Protection, Attn: Tier 2.5 List, 601 57th Street, SE, Charleston, WV 25304.~~ The nominating party has the burden of establishing a basis for listing of a water segment as a Tier 2.5 water. The Board Secretary shall return insufficient nominations to the nominating party. Generally, nominations that fail to address at least three of the qualification criteria shall be considered insufficient.

8.1.a.1. Upon receiving a sufficient nomination of a water or segment of a water for designation as a Tier 2.5 water pursuant to the ~~Board's~~ State's antidegradation policy, the Board Secretary shall, within 180 days of receipt of the nomination, notify each locality in which the water or segment lies and shall provide individual notice to property owners on the nominated segment. Where individual notice to property owners is impracticable, constructive notice by publication shall be provided. The written notice shall include, at a minimum:

8.1.a.1.A. A description of the location of the waters or segment;

8.1.a.1.B. The procedures and criteria for designation as well as the impact of the designation;

8.1.a.1.C. The name of the person(s) making the nomination; and

8.1.a.1.D. The name of a contact person at the Environmental Quality Board Department of Environmental Protection who is knowledgeable about the nomination of the waters or segment. After receipt of the notice of the

nomination, landowners, the public and localities shall be provided 60 days to comment.

8.1.a.2. Qualification Criteria. Factors to be considered in determining whether to assign a Water of Special Concern designation to a water from another category shall include the following:

+

8.1.a.2.A. Impact on private property owners;

8.1.a.2.B. Whether the interests of all affected parties have been adequately represented during the nomination and designation process;

8.1.a.2.C. The location of the water;

8.1.a.2.D. Any previous special designations;

8.1.a.2.E. Existing water quality;

8.1.a.2.F. Factors that indicate unique or exceptional ecological, recreational or aesthetic resource value;

8.1.a.2.G. Impact on economic development in the area, including development of demonstrated natural resources; and

8.1.a.2.H. Other factors determined by the Board Secretary , when applicable.

8.1.a.3. Reclassification of a Water of Special Concern. The Board Secretary may on its own, or at the request of an interested party, consider reclassifying a Water of Special Concern to another antidegradation tier after following notice and comment procedures consistent with paragraph 8.1.a.1. In considering a reclassification, the Board Secretary shall review the criteria outlined in subparagraphs 8.1.a.2.A. through 8.1.a.2.H. above. After such consideration, the Board Secretary may reclassify a Tier 2.5 water in accordance with the ~~notice and comment provisions of 46 CSR-6, Procedural Rules Governing Site Specific Revisions to Water Quality Standards. legislative rulemaking process pursuant to W.Va. Code §29A-3-1 et seq.~~

8.2. Listing process for Tier 3 waters.

8.2.a. Tier 3 Nomination Procedures.

Any interested party or the Board Secretary may nominate a water as an ONRW. After reviewing the nomination the Board Secretary shall consider the qualification criteria and may classify the nominated water as a Tier 3 water in accordance with the notice and comment provisions of ~~46 CSR 6, Procedural Rules Governing Site Specific Revisions to Water Quality Standards.~~ this subsection. The address for filing such petitions is ~~West Virginia Environmental Quality Board, 1615 Washington Street, East, Room 301, Charleston, West Virginia 25311-2126.~~ West Virginia Department of Environmental Protection, Attn: Tier 3 List, 601 57th Street, SE, Charleston, WV 25304. The nominating party has the burden of establishing a basis for listing of a water segment as a Tier 3 water. The Board Secretary shall return insufficient nominations to the nominating party. Generally, nominations that fail to address at least three of the qualification criteria set out in paragraph 8.2.a.2. of this rule shall be considered insufficient.

8.2.a.1. Upon receiving a sufficient nomination of a water or segment of a water for designation as a Tier 3 water pursuant to the Board's State's antidegradation policy, the Board Secretary shall notify each locality in which the water or segment lies and shall provide individual notice to property owners on the nominated segment. Where individual notice to property owners is impracticable, constructive notice by publication shall be provided. The written notice shall include, at a minimum:

8.2.a.1.A. A description of the location of the waters or segment;

8.2.a.1.B. The procedures and criteria for designation as well as the impact of the designation;

8.2.a.1.C. The name of the person(s) making the nomination; and

8.2.a.1.D. The name of a contact person at the Environmental Quality Board Department of Environmental Protection who is knowledgeable about the nomination of the waters

or segment. After receipt of the notice of the nomination, landowners, the public and localities shall be provided 60 days to comment.

8.2.a.2. Qualification Criteria.

Factors to be considered in determining whether to assign an ONRW designation to a water from another category shall include the following:

8.2.a.2.A. Impact on private property owners;

8.2.a.2.B. Whether the interests of all affected parties have been adequately represented during the nomination and designation process;

8.2.a.2.C. The location of the water;

8.2.a.2.D. Any previous special designations;

8.2.a.2.E. Existing water quality;

8.2.a.2.F. Outstanding ecological value;

8.2.a.2.G. Outstanding recreational or aesthetic value; and

8.2.a.2.H. Other factors determined by the Board Secretary, when applicable.

§60-5-9. Public Participation in Antidegradation Reviews/Appeals.

9.1. All antidegradation review findings shall be documented by the Secretary and made part of the public record. The findings, including the baseline water quality, the existing uses, and the tier assigned to the water body are to be available to the public.

9.2. Any required public notice will be provided through the appropriate Class I or Class II legal advertisement in a qualified newspaper with the largest circulation for the county where the activity will occur. The notice will identify the action being considered, list all existing uses identified of the water, and call for comments from the public regarding the proposed activity.

The cost of such publication will be borne by the applicant.

9.3. Public notice, opportunity for public comment, and opportunity for a public hearing, consistent with the requirements of 47 CSR 10-12, will be provided of all activities proposed to be allowed after a Tier 1, 2, 2.5, or 3 antidegradation review. Such public notice may be combined with other required notifications, such as notification to agencies as part of required intergovernmental coordination or notification of a proposed permit decision. Public notice is not required to be provided for proposed activities on Tier 1 or Tier 2 waters for which a review process has not been required, such as activities covered by a WV/NPDES general permits, except that any trading approved by the Secretary for antidegradation purposes will require public notice consistent with the requirements of 47 CSR 10-12.

9.4. Public notice of Tier 2 antidegradation reviews.

9.4.a. After a full Tier 2 review has been completed for a proposed activity, the public notice shall include notice of the availability of the following:

9.4.a.1. The decision as to whether the proposed activity has been determined to comply with the antidegradation implementation rule;

9.4.a.2. Findings from the alternatives analysis;

9.4.a.3. A determination of the impact of the activity to ambient concentrations and baseline water quality;

9.4.a.4. The results of the socio-economic evaluation of the activity;

9.4.a.5. The determination regarding existence of reasonable and cost effective non-degrading or less degrading alternatives; and

9.4.a.6. A description of the water segment that is subject to the antidegradation review.

9.5. Once the intergovernmental coordination

and public notice requirements of subsections 9.1. through 9.5. are satisfied, the Secretary shall make a determination concerning the social or economic importance in the area in which the affected water bodies are located. All determinations, including determinations to prohibit the activity, shall be documented and made a part of the public record.

9.6. Appeals-Final agency decisions, made after public comment, that identify applicable uses, designate tiers, or that find regulated activities to be allowed or prohibited, are final actions that are appealable ~~as set forth in the Administrative Procedures Act. Final agency actions made by the Secretary are appealable to the Board;~~ provided that the designation of waters as Tier 2.5 waters pursuant to subsections 6.2 and 8.1 shall not be subject to appeal.

APPENDIX A

~~WV DNR and WV DEP Waters of Special Concern~~ (Tier 2.5 Waters)

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<u>STREAM CODE</u>	<u>STREAM NAME</u>	<u>LOCATION</u>	<u>LENGTH (MILES)</u>
<u>Tug Fork Watershed</u>			
<u>BST-60-D</u>	<u>CUB BRANCH</u>	<u>The section of stream within Panther Creek State Park, - tributary of Panther Creek of Tug Fork River</u>	<u>0.3</u>
<u>James River Watershed</u>			
<u>J-1-A</u>	<u>EWING RUN</u>	<u>Entire length within WV - tributary of Potts Creek</u>	<u>2.6</u>
<u>J-1-D</u>	<u>NORTH FORK/POTTS CREEK</u>	<u>Entire length - tributary (fork) of Potts Creek</u>	<u>5.7</u>
<u>Kanawha River Watershed (Upper & Lower)</u>			
<u>K-13</u>	<u>LITTLE SIXTEENMILE CREEK</u>	<u>Upper section of stream that is within Chief Cornstalk WMA - tributary of the (Lower) Kanawha River</u>	<u>1.2</u>
<u>K-14-B-1</u>	<u>UNT OF FIVEFORK BRANCH</u>	<u>Entire length of unnamed tributary that drains into Fivefork Branch approx. 0.45 miles upstream of its confluence with Sixteenmile Creek of (Lower) Kanawha River</u>	<u>1.9</u>
<u>K-39-E-3</u>	<u>BAYS FORK</u>	<u>Entire length - tributary of Middle Fork of Davis Creek of (Lower) Kanawha River</u>	<u>1.9</u>
<u>K-39-M-1-A</u>	<u>HOFFMAN HOLLOW</u>	<u>Entire length - tributary of Middlefork Branch of Davis Creek of (Lower) Kanawha River</u>	<u>2.3</u>
<u>K-39-O</u>	<u>SHREWSBURY HOLLOW</u>	<u>Entire length - tributary of Davis Creek of (Lower) Kanawha River</u>	<u>1.5</u>
<u>Elk River Watershed</u>			
<u>KE</u>	<u>ELK RIVER</u>	<u>Begins at its headwater forks (Big Spring, Laurel Run, and Old Field Fork meet) downstream to confluence of Dry Fork</u>	<u>5</u>
<u>KE-111-K</u>	<u>SUGAR CREEK</u>	<u>Headwaters to confluence of Little Sugar Creek - tributary of Elk River</u>	<u>10.5</u>
<u>KE-111-K-2</u>	<u>LITTLE SUGAR CREEK</u>	<u>Entire length - tributary of Sugar Creek of Elk River</u>	<u>7.6</u>
<u>KE-129</u>	<u>VALLEY FORK</u>	<u>Headwaters downstream to confluence of Redlick Run - tributary of Elk River</u>	<u>2.7</u>
<u>KE-133</u>	<u>DRY FORK</u>	<u>Headwaters downstream to confluence of Douglas Fork - tributary of Elk River</u>	<u>3.8</u>
<u>KE-135</u>	<u>BIG RUN</u>	<u>Entire length (south headwater fork incl.) This stream is located approx. 1.78 mi. upstream Blackhole Run - tributary of Elk River</u>	<u>1.9</u>
<u>KE-136</u>	<u>PROPS RUN</u>	<u>Begins with headwater forks downstream to mouth - tributary of Elk River</u>	<u>1.4</u>
<u>KE-137</u>	<u>LAUREL RUN/ELK RIVER</u>	<u>Entire length (south headwater fork included) - tributary of Elk</u>	<u>2.6</u>

<u>KE-139-0.5A</u>	<u>SLATY FORK</u>	<u>River</u>	<u>Entire length - tributary of Old Field Fork of Elk River</u>	<u>4.8</u>
<u>KE-139-B</u>	<u>CROOKED FORK</u>		<u>Begins with headwater forks downstream to mouth - tributary of Old Field Fork of Elk River</u>	<u>2.5</u>
<u>KE-98-B-16</u>	<u>DESERT FORK</u>		<u>Begins at headwaters downstream to the confluence of Roaring Run - tributary of Right Fork of Holly River</u>	<u>5</u>
<u>KE-98-C</u>	<u>LEFT FORK HOLLY RIVER</u>		<u>Tributary of Holly River - section from headwaters downstream to Laurel Fork.</u>	<u>5.8</u>
<u>KE-98-C-1</u>	<u>LAUREL PATCH RUN</u>		<u>Tributary of Left Fork of Holly River of Elk River - section within Elk River WMA</u>	<u>1.5</u>
<u>KE-98-C-11</u>	<u>LAUREL FORK/LEFT FORK HOLLY</u>		<u>Begins at the confluence of Right Fork/Middle Fork/Left Fork of Laurel Fork downstream to mouth - tributary of Left Fork of Holly River</u>	<u>5.6</u>
<u>KE-98-C-14</u>	<u>FALL RUN</u>		<u>Entire length - tributary of Left Fork of Holly River</u>	<u>6.1</u>
<u>Gauley River Watershed</u>				
<u>KG-19-G</u>	<u>ANGLINS CREEK</u>		<u>Headwaters downstream to approx. 1.0 mi. downstream of Sugargrove Creek at the confluence of an unnamed trib - tributary of Meadow River</u>	<u>12.8</u>
<u>KG-19-U-1</u>	<u>BROWN CREEK</u>		<u>Begins with headwater forks downstream to mouth - tributary of Big Clear Creek of Meadow River</u>	<u>3.2</u>
<u>KG-19-U-2-C</u>	<u>OLD FIELD BRANCH</u>		<u>Entire length - tributary of South Fork of Big Clear Creek of Meadow River</u>	<u>2.9</u>
<u>KG-19-U-2-D</u>	<u>JOB KNOB BRANCH</u>		<u>Entire length - tributary of South Fork of Big Clear Creek of Meadow River</u>	<u>3.8</u>
<u>KG-19-V-7</u>	<u>KUHN BRANCH</u>		<u>Entire length - tributary of Little Clear Creek of Meadow River of Gauley River</u>	<u>1.9</u>
<u>KG-20</u>	<u>COLLISON CREEK</u>		<u>Entire length - tributary of Gauley River</u>	<u>6.1</u>
<u>KG-24-E-2</u>	<u>BRUSHY MEADOW CREEK</u>		<u>Begins with headwater forks downstream to mouth - tributary of Grassy Creek of Hominy Creek</u>	<u>5.2</u>
<u>KG-24-H.8</u>	<u>PRICE FORK</u>		<u>Entire length - tributary of Hominy Creek of Gauley River</u>	<u>2.8</u>
<u>KG-32-J</u>	<u>CRANES NEST RUN</u>		<u>Entire length - tributary of Panther Creek of Gauley River</u>	<u>2.3</u>
<u>KG-34-B</u>	<u>COAL SIDING RUN</u>		<u>Begins with headwater forks downstream to mouth - tributary of Cherry River</u>	<u>1.5</u>
<u>KG-34-E</u>	<u>LAUREL CREEK/CHERRY RIVER</u>		<u>From Headwaters downstream to McMillion Ck - tributary of Cherry River</u>	<u>9.2</u>
<u>KG-34-E-11</u>	<u>MIDDLE BRANCH</u>		<u>Entire length - tributary of Laurel Creek of Cherry River</u>	<u>3.3</u>
<u>KG-34-E-13</u>	<u>COLD SPRING BRANCH</u>		<u>Entire length - tributary of Laurel Creek of Cherry River</u>	<u>3.1</u>

<u>KG-34-E-8</u>	<u>BEECH RUN</u>	<u>Entire length - tributary of Laurel Creek of Cherry River</u>	<u>3.1</u>
<u>KG-34-E-9</u>	<u>HOGCAMP RUN</u>	<u>Entire length - tributary of Laurel Creek of Cherry River</u>	<u>2.6</u>
<u>KG-34-F</u>	<u>LITTLE LAUREL CREEK</u>	<u>Entire length - tributary of Cherry River</u>	<u>9.9</u>
<u>KG-34-G-13</u>	<u>BIG RUN</u>	<u>Entire length - tributary of South Fork of Cherry River</u>	<u>1.4</u>
<u>KG-34-G-5</u>	<u>ELKLICK RUN</u>	<u>Entire length - tributary of South Fork of Cherry River</u>	<u>2.1</u>
<u>KG-34-G-8</u>	<u>BECKY RUN</u>	<u>Entire length - tributary of South Fork of Cherry River</u>	<u>2.6</u>
<u>KG-34-H</u>	<u>NORTH FORK/CHERRY RIVER</u>	<u>Entire length - tributary of Cherry River</u>	<u>16.3</u>
<u>KG-34-H-14</u>	<u>BEAR RUN</u>	<u>Entire length - tributary of North Fork of Cherry River</u>	<u>2.2</u>
<u>KG-34-H-4</u>	<u>HUNTERS RUN</u>	<u>Entire length - tributary of North Fork of Cherry River</u>	<u>3.1</u>
<u>KG-34-H-5</u>	<u>COATS RUN</u>	<u>Entire length downstream of Summit Lake - tributary of North Fork of Cherry</u>	<u>1.1</u>
<u>KG-34-H-9</u>	<u>ARMSTRONG RUN</u>	<u>Entire length - tributary of North Fork of Cherry River</u>	<u>1.2</u>
<u>KG-45</u>	<u>BIG LAUREL CREEK</u>	<u>Entire length - tributary of the Gauley River</u>	<u>6.6</u>
<u>KG-57</u>	<u>MILLER MILL RUN</u>	<u>Entire length - tributary of the Gauley River</u>	<u>4.4</u>
<u>KG-59</u>	<u>BIG RUN</u>	<u>Entire length - tributary of the Gauley River</u>	<u>2.2</u>
<u>KG-60</u>	<u>TURKEY CREEK</u>	<u>Entire length - tributary of Gauley River</u>	<u>4.9</u>
<u>KG-67</u>	<u>STRAIGHT CREEK</u>	<u>Begins with headwater forks downstream to mouth - tributary of Gauley River</u>	<u>2.7</u>
<u>KG-70</u>	<u>BIG RUN/GAULEY RIVER</u>	<u>Entire length - tributary of the Gauley River</u>	<u>4.1</u>
<u>KG-72</u>	<u>MIDDLE FORK/GAULEY RIVER</u>	<u>Entire length - tributary of the Gauley River</u>	<u>3</u>
<u>KGC</u>	<u>CRANBERRY RIVER</u>	<u>Section from Red Run (Glades area) downstream to mouth - tributary of the Gauley River</u>	<u>28</u>
<u>KGC-14</u>	<u>LICK BRANCH</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>1.2</u>
<u>KGC-15</u>	<u>HANGING ROCK BRANCH</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>1.2</u>
<u>KGC-19</u>	<u>DOGWAY FORK</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>8.8</u>
<u>KGC-21</u>	<u>BIRCHLOG RUN</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>2.2</u>
<u>KGC-3</u>	<u>JAKEMAN RUN</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>3.2</u>
<u>KGC-4</u>	<u>BARRENSHREE RUN</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>4.6</u>
<u>KGC-7</u>	<u>BEE RUN</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>2.2</u>
<u>KGC-8</u>	<u>FOXTREE RUN</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>2.2</u>
<u>KGC-9</u>	<u>ALDRICH BRANCH</u>	<u>Entire length - tributary of Cranberry River of Gauley River</u>	<u>2.3</u>
<u>KGW</u>	<u>WILLIAMS RIVER</u>	<u>Tributary of the Gauley River - section from Lick Branch upstream to headwaters.</u>	<u>23.2</u>
<u>KGW-1</u>	<u>CRAIG RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>2.7</u>
<u>KGW-19</u>	<u>UPPER BANNOCK SHOALS RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>1.8</u>
<u>KGW-2</u>	<u>JONATHAN RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>1.4</u>
<u>KGW-20</u>	<u>TEA CREEK</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>6</u>
<u>KGW-20-A</u>	<u>LICK CREEK</u>	<u>Entire length - tributary of Tea Creek of Williams River of Gauley</u>	<u>1.8</u>

<u>KGW-21</u>	<u>SUGAR CREEK</u>	<u>River</u>	<u>3.6</u>
<u>KGW-22</u>	<u>LITTLE LAUREL CREEK</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>2.5</u>
<u>KGW-25</u>	<u>DAY RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>3.1</u>
<u>KGW-26</u>	<u>BLACK MOUNTAIN RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>1.7</u>
<u>KGW-27</u>	<u>MOUNTAIN LICK RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>2.1</u>
<u>KGW-3</u>	<u>SAWYER RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>1.3</u>
<u>KGW-4</u>	<u>SPICE RUN</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>1.8</u>
<u>KGW-8</u>	<u>WHITE OAK FORK</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>2.7</u>
<u>KGW-9</u>	<u>LICK BRANCH</u>	<u>Entire length - tributary of Williams River of Gauley River</u>	<u>1.4</u>
<u>New River Watershed</u>			
<u>KN-17</u>	<u>MANNS CREEK</u>	<u>Entire length within Babcock State park Boundaries</u>	<u>5.2</u>
<u>KN-23</u>	<u>BUFFALO CREEK</u>	<u>From mouth upstream approx 2.5 mi. to headwater forks - tributary of (Lower) New River</u>	<u>2.4</u>
<u>KN-24</u>	<u>SLATER CREEK</u>	<u>Section within New River Gorge Nat. River - tributary of (Lower) New River</u>	<u>0.8</u>
<u>KN-27-C</u>	<u>CHESTNUT KNOB FORK</u>	<u>Entire length - tributary of Laurel Creek of (Lower) New River</u>	<u>3.5</u>
<u>KN-32</u>	<u>MEADOW CREEK</u>	<u>Section w/n New River Gorge National River that is upstream of Lefthand Fork) - tributary of (Lower) New River</u>	<u>2.6</u>
<u>KN-37</u>	<u>FALL BRANCH</u>	<u>Section w/n New River Gorge National River - tributary of (Lower) New River</u>	<u>1.9</u>
<u>KN-51-O</u>	<u>TURKEY CREEK</u>	<u>From headwater forks downstream to mouth - tributary of Indian Creek of (Upper) New River</u>	<u>9.2</u>
<u>KNB-13</u>	<u>CAMP CREEK</u>	<u>from HW downstream to confluence w/ Mash Fork</u>	<u>9.3</u>
<u>KNB-13-D</u>	<u>MASH FORK</u>	<u>Begins at confluence of Sugar Camp Branch downstream to the confluence of Marsh Fork approx. 0.89 mi. above mouth - tributary of Camp Creek of Bluestone River of (Lower) New River</u>	<u>2.9</u>
<u>Greenbrier River Watershed</u>			
<u>KNB-22.7-A-1-(S)</u>	<u>MILLIGAN CREEK</u>	<u>Two segments - Northern segment begins near State Rt.60 (near Richlands) to "mouth" or where it sinks and; the entire second segment is included - located near boundary of Asbury/Lewisburg topo quads</u>	<u>5.7</u>
<u>KNB-22-E-1-B</u>	<u>FLYNN CREEK</u>	<u>Entire length (sinking creek) - to confluence w/ Sinking Ck.</u>	<u>4.3</u>
<u>KNB-28-P-2</u>	<u>TWOMILE RUN</u>	<u>Entire length - tributary of North Fork of Anthony Creek of Greenbrier River</u>	<u>1.6</u>

<u>KNG-28-Q-1</u>	<u>LAUREL RUN / MEADOW CREEK</u>	<u>Entire length - tributary of Meadow Creek of Anthony Creek of Greenbrier River</u>	<u>4.2</u>
<u>KNG-30-0.5A-1-A</u>	<u>BURNS RUN</u>	<u>Entire length (sinking creek) - to confluence w/ Culverson Ck.</u>	<u>4.1</u>
<u>KNG-49</u>	<u>SWAGO CREEK</u>	<u>Entire length - tributary of Greenbrier River</u>	<u>3.8</u>
<u>KNG-53-G</u>	<u>BARCLAY RUN</u>	<u>Entire length - tributary of Knapps Creek of Greenbrier River</u>	<u>1.7</u>
<u>KNG-53-H</u>	<u>DOUTHAT CREEK</u>	<u>Entire length - tributary of Knapps Creek of Greenbrier R.</u>	<u>9</u>
<u>KNG-60</u>	<u>LAUREL RUN / GREENBRIER R</u>	<u>Entire length - tributary of Greenbrier R.</u>	<u>3</u>
<u>KNG-66-D</u>	<u>SHOCK RUN</u>	<u>Entire length - tributary of Sitling Creek of Greenbrier River</u>	<u>4.5</u>
<u>KNG-66-E-4</u>	<u>LEFT PRONG</u>	<u>Entire length - tributary of Galford Run of Sitling Creek of Greenbrier River</u>	<u>3.3</u>
<u>KNG-68-A</u>	<u>NORTH FORK DEER CREEK</u>	<u>Tributary of Deer Creek of Greenbrier River - section from headwaters downstream to Sutton Run</u>	<u>6</u>
<u>KNG-68-A-3</u>	<u>SUTTON RUN</u>	<u>Entire length - tributary of North Fork of Deer Creek of Greenbrier River</u>	<u>3</u>
<u>KNG-68-A-4</u>	<u>TACKER FORK</u>	<u>Entire length - tributary of North Fork of Deer Creek of Greenbrier River</u>	<u>2.5</u>
<u>KNG-68-A-5</u>	<u>BLACK RUN</u>	<u>Entire length - tributary of North Fork of Deer Creek of Greenbrier River</u>	<u>2.4</u>
<u>KNG-68-A-6</u>	<u>ELLEBER RUN</u>	<u>Entire length - tributary of North Fork of Deer Creek of Greenbrier River</u>	<u>3.1</u>
<u>KNG-68-A-6-A</u>	<u>GRIFFIN RUN</u>	<u>Entire length - tributary of Elleber Run of North Fork of Deer Creek of Greenbrier River</u>	<u>1.7</u>
<u>KNG-70</u>	<u>LEATHERBARK RUN</u>	<u>Entire length - tributary of Greenbrier River</u>	<u>5.8</u>
<u>KNG-74</u>	<u>TROUT RUN</u>	<u>Entire length - tributary of Greenbrier River</u>	<u>1.1</u>
<u>KNG-78</u>	<u>EAST FORK GREENBRIER RIVER</u>	<u>uppermost 5.5 miles (above Abes Run) - Entire length - tributary of Greenbrier River</u>	<u>5.5</u>
<u>KNG-78-C</u>	<u>LITTLE RIVER / EAST FORK GREENBRIER</u>	<u>From headwaters to confluence of Buffalo Fork - tributary of East Fork of Greenbrier River</u>	<u>6.3</u>
<u>KNG-78-G</u>	<u>FIVEMILE HOLLOW</u>	<u>Entire length - tributary of East Fork of Greenbrier River</u>	<u>2.3</u>
<u>KNG-78-H</u>	<u>POCA RUN</u>	<u>Entire length - tributary of East Fork of Greenbrier River</u>	<u>3</u>
<u>KNG-78-H-1</u>	<u>LONG RUN</u>	<u>Entire length - tributary of Poca Run of East Fork of Greenbrier River</u>	<u>2.8</u>
<u>KNG-78-K</u>	<u>MULLENAX RUN</u>	<u>Entire length - tributary of East Fork of Greenbrier River</u>	<u>2.9</u>
<u>KNG-78-L</u>	<u>ABES RUN</u>	<u>Entire length - tributary of East Fork of Greenbrier River</u>	<u>2.6</u>
<u>KNG-79</u>	<u>WEST FORK GREENBRIER RIVER</u>	<u>Entire length - tributary of Greenbrier River</u>	<u>18.7</u>
<u>KNG-79-B</u>	<u>FILL RUN</u>	<u>Entire length - tributary of West Fork of Greenbrier River</u>	<u>1.9</u>
<u>KNG-79-C</u>	<u>LITTLE RIVER</u>	<u>From headwater forks downstream to mouth - tributary of West Fork of Greenbrier River</u>	<u>7.6</u>

<u>KNG-79-C-1</u>	<u>SPAN OAK RUN</u>	<u>Entire length - tributary of Little River of West Fork of Greenbrier River</u>	<u>2.3</u>
<u>KNG-79-C-2</u>	<u>CLUBHOUSE RUN</u>	<u>Entire length - tributary of Little River of West Fork of Greenbrier River</u>	<u>2.7</u>
<u>KNG-79-C-3</u>	<u>HINKLE RUN</u>	<u>Entire length - tributary of Little River of West Fork of Greenbrier River</u>	<u>2.6</u>
<u>Little Kanawha River Watershed LK-131</u>	<u>GETOUT RUN</u>	<u>Entire length - tributary of Little Kanawha River</u>	<u>3</u>
<u>Cheat River Watershed MC-12-B-6</u>	<u>MILL RUN</u>	<u>Section from Headwaters downstream to unnamed tributary at Hazelton - tributary of Little Sandy Creek</u>	<u>3.5</u>
<u>MC-18</u>	<u>ROARING CREEK</u>	<u>Section from headwaters downstream to 1.2 miles above mouth entering Cheat</u>	<u>8</u>
<u>MC-20</u>	<u>ELSEY RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>3.4</u>
<u>MC-2-A</u>	<u>DARNELL HOLLOW</u>	<u>Section within Coopers Rock State Forest - tributary of Morgan Run of Cheat (Lake)</u>	<u>1.6</u>
<u>MC-33-A</u>	<u>FLAG RUN</u>	<u>Entire length - tributary to Buffalo Creek of Cheat</u>	<u>5.5</u>
<u>MC-36</u>	<u>WOLF CREEK</u>	<u>Tributary of Cheat - section from headwaters downstream to point 2 miles from Cheat River.</u>	<u>5</u>
<u>MC-41</u>	<u>LONG RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>2.1</u>
<u>MC-45</u>	<u>TOBES RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>1.2</u>
<u>MC-46-B</u>	<u>RIGHT FORK BULL RUN</u>	<u>Entire length - tributary of Bull Run of Cheat</u>	<u>3.8</u>
<u>MC-51-A</u>	<u>RIGHT FORK CLOVER RUN</u>	<u>Entire length - Rt Fork of Clover Run of Cheat</u>	<u>5.5</u>
<u>MC-51-B</u>	<u>LEFT FORK CLOVER RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>9.2</u>
<u>MC-51-B-5</u>	<u>INDIAN RUN</u>	<u>Entire length - Left Fork of Clover Run of Cheat</u>	<u>4.2</u>
<u>MC-52</u>	<u>MINEAR RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>4.3</u>
<u>MC-52-0.7A</u>	<u>BRIDGE RUN</u>	<u>Entire length - tributary of Minear Run of Cheat. Mainstem entirely on Pub Land</u>	<u>1.1</u>
<u>MC-54</u>	<u>HORSESHOE RUN</u>	<u>Headwaters downstream to Laurel Run (MC-54-F) - tributary of Cheat</u>	<u>9.5</u>
<u>MC-54-A</u>	<u>MIKE RUN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat. Mainstem entirely on Pub Land</u>	<u>3.9</u>
<u>MC-54-C</u>	<u>MAXWELL RUN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat</u>	<u>2.9</u>

<u>MC-54-D</u>	<u>HYLE RUN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat</u>	<u>3.9</u>
<u>MC-54-E</u>	<u>LICK DRAIN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat</u>	<u>1.8</u>
<u>MC-54-G</u>	<u>LYNN RUN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat</u>	<u>1.3</u>
<u>MC-54-H</u>	<u>THUNDERSTRUCK RUN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat</u>	<u>3.9</u>
<u>MC-54-I</u>	<u>LEADMINE RUN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat</u>	<u>4.8</u>
<u>MC-54-K</u>	<u>TWELVEMILE RUN</u>	<u>Entire length - tributary of Horseshoe Run of Cheat</u>	<u>2.2</u>
<u>MC-55</u>	<u>DRY RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>3.2</u>
<u>MC-56</u>	<u>MILL RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>2.7</u>
<u>MC-57</u>	<u>WOLF RUN</u>	<u>Entire length - tributary of Cheat</u>	<u>1.9</u>
<u>MC-60-D</u>	<u>BLACKWATER RIVER</u>	<u>Section from North Fork upstream approx. 2.6 miles to Blackwater Falls S.P. border.</u>	<u>2.6</u>
<u>MC-60-G</u>	<u>RED RUN</u>	<u>Beginning at the North/South Forks downstream to edge of Forest boundary. 0.8 miles from mouth - tributary of Dry Fork</u>	<u>4.8</u>
<u>MC-60-K-1</u>	<u>THREE SPRING RUN</u>	<u>Entire length - tributary of Gladly Fork of Dry Fork</u>	<u>1.2</u>
<u>MC-60-K-11</u>	<u>MCCRAY CREEK</u>	<u>Entire length - tributary of Gladly Fork of Dry Fork</u>	<u>2.4</u>
<u>MC-60-K-14</u>	<u>DANIELS CREEK</u>	<u>Entire length - tributary of Gladly Fork of Dry Fork</u>	<u>3.2</u>
<u>MC-60-K-16</u>	<u>WEST FORK GLADLY FORK</u>	<u>From headwaters downstream to 2.0 miles from confluence w/ East Fork - tributary of Gladly Fork of Dry Fork</u>	<u>4.1</u>
<u>MC-60-K-17</u>	<u>EAST FORK GLADLY FORK</u>	<u>Section upstream of Louk Run - tributary of Gladly Fork</u>	<u>4.8</u>
<u>MC-60-K-17-A</u>	<u>LOUK RUN</u>	<u>Entire length - tributary of East Fork of Gladly Fork of Dry Fork</u>	<u>1.2</u>
<u>MC-60-K-2</u>	<u>PANTHER CAMP RUN</u>	<u>Entire length - tributary of Gladly Fork of Dry Fork</u>	<u>1.7</u>
<u>MC-60-K-2-A</u>	<u>HOG RUN</u>	<u>Entire length - tributary of Panther Camp Run of Gladly Fork of Dry Fork</u>	<u>1.2</u>
<u>MC-60-K-4</u>	<u>FIVE LICK CREEK</u>	<u>Entire length - tributary of Gladly Fork of Dry Fork</u>	<u>1.7</u>
<u>MC-60-K-5</u>	<u>WOODFORD RUN</u>	<u>Entire length - tributary of Gladly Fork of Dry Fork</u>	<u>1.1</u>
<u>MC-60-K-6</u>	<u>BAKER CAMP RUN</u>	<u>Entire length - tributary of Gladly Fork of Dry Fork</u>	<u>1.2</u>
<u>MC-60-N-4</u>	<u>BEAVERDAM RUN</u>	<u>Headwaters downstream to confluence of unnamed tributary - tributary of Laurel Fork of Dry Fork</u>	<u>2.1</u>
<u>MC-60-O-2</u>	<u>FLATROCK RUN</u>	<u>Entire length - tributary of Red Creek of Dry Fork</u>	<u>2.9</u>
<u>MC-60-O-3</u>	<u>GANDY RUN</u>	<u>Entire length - tributary of Red Creek of Dry Fork</u>	<u>2.3</u>
<u>MC-60-R</u>	<u>TORY CAMP RUN</u>	<u>Entire length - tributary of Dry Fork</u>	<u>2.4</u>
<u>MC-60-T</u>	<u>GANDY CREEK</u>	<u>Entire length except lowermost 1.3 miles - tributary of Dry Fork</u>	<u>18.5</u>
<u>MC-60-T-1</u>	<u>LOWER TWO SPRING RUN</u>	<u>Entire length - tributary of Gandy Creek of Dry Fork</u>	<u>2.3</u>
<u>MC-60-T-10</u>	<u>NARROW RIDGE RUN</u>	<u>Entire length (downstream of Spruce Knob Lake) - tributary of Gandy Creek of Dry Fork</u>	<u>2.2</u>
<u>MC-60-T-11</u>	<u>WARNER RUN</u>	<u>Entire length - tributary of Gandy Creek of Dry Fork</u>	<u>1.8</u>
<u>MC-60-T-2</u>	<u>UPPER TWO SPRING RUN</u>	<u>Entire length - tributary of Gandy Creek of Dry Fork</u>	<u>2.5</u>
<u>MC-60-T-3</u>	<u>SWALLOW ROCK RUN</u>	<u>Entire length - tributary of Gandy Creek of Dry Fork</u>	<u>1.8</u>

<u>MC-60-T-6</u>	<u>TAYLOR RUN</u>	<u>Entire length - tributary of Gandy Creek of Dry Fork</u>	<u>0.9</u>
<u>MC-60-T-8</u>	<u>BIG RUN</u>	<u>Entire length - tributary of Gandy Creek of Dry Fork</u>	<u>3.8</u>
<u>MC-60-T-9</u>	<u>GRANT'S BRANCH</u>	<u>Entire length - tributary of Gandy Creek of Dry Fork</u>	<u>2.8</u>
<u>MCS-12</u>	<u>LITTLE LAUREL RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>1.3</u>
<u>MCS-13</u>	<u>LITTLE BLACK FORK</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>4.7</u>
<u>MCS-14</u>	<u>CLIFTON RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2.1</u>
<u>MCS-15</u>	<u>RATTLESNAKE RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>5</u>
<u>MCS-16</u>	<u>JOHNS RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2.7</u>
<u>MCS-22</u>	<u>TAYLOR RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>3</u>
<u>MCS-33</u>	<u>FISHING HAWK CREEK</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>3.6</u>
<u>MCS-3-A</u>	<u>SOUTH BRANCH</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>3.6</u>
<u>MCS-4</u>	<u>JOBS RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>1.7</u>
<u>MCS-40</u>	<u>YOKUM RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2.6</u>
<u>MCS-43</u>	<u>GLADE RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2.7</u>
<u>MCS-46</u>	<u>RED RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2.8</u>
<u>MCS-47</u>	<u>BLISTER RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2</u>
<u>MCS-48</u>	<u>FISH HATCHERY RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2.7</u>
<u>MCS-49</u>	<u>LAMBERT RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>3.2</u>
<u>MCS-5</u>	<u>LAUREL RUN / SHAVERS FORK</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>3.5</u>
<u>MCS-50</u>	<u>FIRST FORK</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>5.4</u>
<u>MCS-53</u>	<u>BEAVER CREEK</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>1.7</u>
<u>MCS-54</u>	<u>SECOND FORK</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>4.1</u>
<u>MCS-57</u>	<u>BLACK RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>2.9</u>
<u>MCS-6-B</u>	<u>AARONS RUN</u>	<u>Entire length - tributary of Pleasant Run of Shavers Fork of Cheat</u>	<u>2.4</u>
<u>MCS-9</u>	<u>NAIL RUN</u>	<u>Entire length - tributary of Shavers Fork of Cheat</u>	<u>1.7</u>

Tygart River Watershed

<u>MT-18-E-4-B</u>	<u>FROG RUN</u>	<u>Entire length - tributary of Right Fork of Little Sandy Creek of Sandy Creek of Tygart Valley</u>	<u>3.4</u>
<u>MT-44</u>	<u>MATHIUS RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>1.7</u>
<u>MT-45-C</u>	<u>RIGHT FORK CHENOWETH CREEK</u>	<u>Entire length - tributary of Chenoweth Creek of Tygart Valley</u>	<u>3.2</u>
<u>MT-47</u>	<u>BEAVER CREEK</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>6.2</u>
<u>MT-50-A</u>	<u>RIGHT FORK FILES CREEK</u>	<u>Entire length - tributary of Files Creek of Tygart Valley</u>	<u>8.3</u>
<u>MT-50-A-1</u>	<u>LIMEKILN RUN</u>	<u>Entire length - tributary of Right Fork of Files Creek of Tygart Valley</u>	<u>2.1</u>
<u>MT-50-B</u>	<u>LEFT FORK FILES CREEK</u>	<u>Confluence of Hill Run downstream to mouth - tributary of Files Creek of Tygart Valley</u>	<u>2.8</u>
<u>MT-61</u>	<u>SHAVERS RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>7</u>

<u>MT-64</u>	<u>MILL CREEK</u>	<u>Begins with headwater forks downstream to confluence of unnamed trib approx. 0.47 mi. above the confluence of Buck Run - tributary of Tygart Valley</u>	<u>10.7</u>
<u>MT-64-C</u>	<u>GLADE RUN</u>	<u>Entire length - tributary of Mill Creek of Tygart Valley</u>	<u>1.6</u>
<u>MT-64-E</u>	<u>MEATBOX RUN</u>	<u>Entire length - tributary of Mill Creek of Tygart Valley</u>	<u>1.2</u>
<u>MT-64-F</u>	<u>POTATOHOLE RUN</u>	<u>Entire length - tributary of Mill Creek of Tygart Valley</u>	<u>1.8</u>
<u>MT-66</u>	<u>RIFFLE CREEK</u>	<u>Headwaters downstream to confluence of McGee Run - tributary of Tygart Valley</u>	<u>1.9</u>
<u>MT-66-B</u>	<u>MCGEE RUN</u>	<u>Entire length - tributary of Riffle Creek Tygart Valley</u>	<u>3.4</u>
<u>MT-66-C</u>	<u>BACK FORK</u>	<u>Entire length - tributary of Riffle Creek Tygart Valley</u>	<u>2</u>
<u>MT-67</u>	<u>RAFE RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>1.5</u>
<u>MT-68</u>	<u>BECKY CREEK</u>	<u>from CR 56 bridge upstream</u>	<u>7.5</u>
<u>MT-68-A</u>	<u>BIG BRANCH</u>	<u>Entire length - tributary of Becky Creek of Tygart Valley</u>	<u>2.3</u>
<u>MT-72</u>	<u>HAMILTON RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>2.5</u>
<u>MT-73</u>	<u>CLAY RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>2.6</u>
<u>MT-74</u>	<u>ELKWATER FORK</u>	<u>Headwaters downstream to confluence of Mowry Run - tributary of Tygart Valley</u>	<u>5.2</u>
<u>MT-74-A</u>	<u>MOWRY RUN</u>	<u>Entire length - tributary of Elkwater Fork of Tygart Valley</u>	<u>2.3</u>
<u>MT-74-B</u>	<u>LIMEKILN RUN</u>	<u>Entire length - tributary of Elkwater Fork of Tygart Valley</u>	<u>1.9</u>
<u>MT-75</u>	<u>STEWART RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>8.1</u>
<u>MT-77</u>	<u>CONLEY RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>4.3</u>
<u>MT-78</u>	<u>RALSTON RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>7</u>
<u>MT-79</u>	<u>WINDY RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>4.6</u>
<u>MT-80</u>	<u>LOGAN RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>2.5</u>
<u>MT-81</u>	<u>BIG RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>5.1</u>
<u>MTB-28</u>	<u>BIG RUN</u>	<u>Entire length - tributary of Tygart Valley</u>	<u>4.7</u>
<u>MTB-31</u>	<u>RIGHT FORK BUCKHANNON RIVER</u>	<u>From headwaters downstream to UNT at Pickens</u>	<u>2.1</u>
<u>MTB-31-B</u>	<u>REGER RUN</u>	<u>Entire length - tributary of Right Fork of Buckhannon of Tygart Valley</u>	<u>1.1</u>
<u>MTB-31-C</u>	<u>ALEC RUN</u>	<u>Entire length - tributary of Right Fork of Buckhannon of Tygart Valley</u>	<u>1.9</u>
<u>MTB-31-D</u>	<u>MILLSITE RUN</u>	<u>Entire length - tributary of Right Fork of Buckhannon of Tygart Valley</u>	<u>3.8</u>
<u>MTM</u>	<u>MIDDLE FORK RIVER</u>	<u>Begins at confluence of Birch Fork (at Adolph) downstream to confluence of Cassity Fork - tributary of Tygart Valley</u>	<u>7.3</u>
<u>MTM-11-D</u>	<u>JACKSON FORK</u>	<u>Entire length - tributary of Right Fork of Middle Fork of Tygart Valley</u>	<u>3.9</u>
<u>MTM-16</u>	<u>CASSITY FORK</u>	<u>Headwaters downstream to confluence of Mulberry Fork -</u>	<u>4.2</u>

<u>MTM-16-A</u>	<u>PANTHER RUN</u>	<u>tributary of Middle Fork of Tygart Valley</u> <u>Headwaters downstream to confluence of an unnamed tributary</u> <u>approx. 0.64 mi. above mouth - tributary of Cassity Fork of Middle</u> <u>Fork of Tygart Valley</u>	<u>4.4</u>
<u>MTM-21</u>	<u>PLEASANT RUN</u>	<u>Entire length - tributary of Middle Fork of Tygart Valley</u>	<u>1.8</u>
<u>MTM-22</u>	<u>LAUREL RUN</u>	<u>Entire length - tributary of Middle Fork of Tygart Valley</u>	<u>2.6</u>
<u>MTM-23</u>	<u>LAUREL BRANCH</u>	<u>Entire length - tributary of Middle Fork of Tygart Valley</u>	<u>4</u>
<u>MTM-24</u>	<u>SUGAR RUN</u>	<u>Entire length - tributary of Middle Fork of Tygart Valley</u>	<u>2.3</u>
<u>MTM-25</u>	<u>SCHOOLCRAFT RUN</u>	<u>Entire length - tributary of Middle Fork of Tygart Valley</u>	<u>3.1</u>
<u>MTM-26</u>	<u>BIRCH FORK</u>	<u>Begins at confluence of Sugar Drain downstream - tributary of</u> <u>Middle Fork of Tygart Valley</u>	<u>3.6</u>
<u>MTM-27</u>	<u>MITCHELL LICK FORK</u>	<u>Entire length - tributary of Middle Fork of Tygart Valley</u>	<u>2.5</u>
<u>Upper Ohio North</u>			
<u>O-102-A</u>	<u>WHITEOAK RUN</u>	<u>Section of White Oak Run (including forks) w/n Tomlinson Run</u> <u>S.P. - tributary of Tomlinson Run of Ohio River</u>	<u>0.5</u>
<u>Twelvepole Creek Watershed</u>			
<u>O-2-H-2-A</u>	<u>STOWERS BRANCH</u>	<u>Begins with headwater forks downstream to entering Beech Fork</u> <u>Lake - tributary of Beech Fork of Twelvepole Creek</u>	<u>1</u>
<u>O-2-P-23</u>	<u>ARKANSAS BRANCH</u>	<u>Entire length - tributary of West Fork of Twelvepole Creek</u>	<u>2</u>
<u>O-2-P-25</u>	<u>SWEETWATER BRANCH</u>	<u>Entire length w/n Cabwayingo S.P. - tributary of West Fork of</u> <u>Twelvepole Creek</u>	<u>0.9</u>
<u>O-2-P-26</u>	<u>LONG BRANCH</u>	<u>Entire length - tributary of West Fork of Twelvepole Creek</u>	<u>2.6</u>
<u>O-2-P-27</u>	<u>SPRUCE FORK</u>	<u>Entire length - tributary of West Fork of Twelvepole Creek</u>	<u>1.8</u>
<u>O-2-Q-14</u>	<u>RICH CREEK</u>	<u>The section of Rich Creek w/n East Lynn Lake WMA - tributary of</u> <u>East Fork of Twelvepole Creek</u>	<u>1.3</u>
<u>O-2-Q-16</u>	<u>BLUELICK BRANCH</u>	<u>Entire length to East Lynn Lake - tributary of East Fork of</u> <u>Twelvepole Creek</u>	<u>2.3</u>
<u>Guyandotte River Watershed</u>			
<u>OG-102</u>	<u>BRICKLE BRANCH</u>	<u>Entire length - tributary of Guyandotte River</u>	<u>1.6</u>
<u>OG-29-C</u>	<u>HORSESHOE BRANCH</u>	<u>Entire length - tributary of Sixmile of Guyandotte River</u>	<u>1</u>
<u>OG-61</u>	<u>BUFFALO CREEK</u>	<u>Entire length of stream that is w/n Chief Logan S.P. - tributary of</u> <u>Guyandotte River</u>	<u>2.8</u>
<u>OG-96-A</u>	<u>STURGEON BRANCH</u>	<u>Entire length - tributary of Big Run Creek to Guyandotte River</u>	<u>1.6</u>
<u>OGM-8-B</u>	<u>LEFT FORK MILL CREEK</u>	<u>Begins with headwater forks downstream to approx. 0.93 mi.</u> <u>upstream of the convergence of the Left Fork and Right Fork of</u>	<u>2.7</u>

Mill Creek - tributary of Mill Creek of Mud River of Guyandotte River

Potomac Direct Drains

Watershed

P-9-G-2

SOUTH FORK INDIAN RUN

Entire length - tributary of Indian Creek

3.8

Cacapon River Watershed

PC-0-9

CONNER HOLLOW

Entire length - tributary of Cacapon

3.8

PC-1

CONSTANT RUN

Entire length - tributary of Cacapon

2.6

PC-10

EDWARDS RUN

Headwaters downstream to about 0.9 mi. from mouth - tributary of Cacapon

7

PC-17

HAWK RUN

Entire length - tributary of Cacapon

4.6

PC-23

TROUT RUN

Entire length - tributary of Cacapon

16.6

PC-24-H

LOWER COVE RUN

Entire length - tributary of Lost River of Cacapon

4.6

North Branch/Potomac River

Watershed

PNB-14

HOWELL RUN

Entire length - tributary of North Branch Potomac

3.8

PNB-15

DEEP RUN

Entire length - tributary of North Branch Potomac

4.8

PNB-15-A

CRANBERRY RUN

Entire length - tributary of Deep Run of North Branch Potomac

2.7

South Branch/Potomac River

Watershed

PSB-13

MILL RUN

Entire length - tributary of South Branch Potomac

8.9

PSB-21-F

DUMPLING RUN

Beginning at the headwater forks to mouth - tributary of South Fork of South Branch Potomac

2.6

PSB-21-K

ROUGH RUN

Entire length - tributary of South Fork of South Branch Potomac

6.9

PSB-25-C-2

SPRING RUN

Entire length - tributary of South Mill Creek of Mill Creek of South Branch Potomac

3

PSB-28-A-1

BIG RUN

Entire length - tributary of Jordan Run of North Fork of South Branch Potomac

2.6

PSB-28-A-2

LAUREL RUN / JORDAN RUN

Entire length - tributary of Jordan Run of North Fork of South Branch Potomac

3.2

PSB-28-B

SAMUEL RUN

Entire length - tributary of North Fork of South Branch Potomac

2.8

PSB-28-C

BROAD RUN

Entire length - tributary of North Fork of South Branch Potomac

2.4

PSB-28-E

HIGH RIDGE RUN

Entire length - tributary of North Fork of South Branch Potomac

2.3

PSB-28-EE

BIG RUN

Entire length - tributary of North Fork of South Branch Potomac

12.8

<u>PSB-28-EE-2</u>	<u>SAWMILL BRANCH</u>	<u>Entire length - tributary of North Fork of the South Branch Potomac</u>	<u>3.2</u>
<u>PSB-28-EE-2-A</u>	<u>BACK RUN</u>	<u>Entire length - tributary of Sawmill Branch of Big Run of North Fork of the South Branch Potomac</u>	<u>3.4</u>
<u>PSB-28-EE-3</u>	<u>TEETER CAMP RUN</u>	<u>Entire length - tributary of Big Run of North Fork of the South Branch Potomac</u>	<u>3.7</u>
<u>PSB-28-EE-3-A</u>	<u>HEMLOCK RUN</u>	<u>Entire length - tributary of Teeter Camp Run of Big Run of North Fork of the South Branch Potomac</u>	<u>1.9</u>
<u>PSB-28-EE-3-B</u>	<u>LEONARD SPRING HOLLOW</u>	<u>Entire length - tributary of Teeter Camp Run of Big Run of North Fork of the South Branch Potomac</u>	<u>1.2</u>
<u>PSB-28-EE-3-C</u>	<u>MIDDLE RIDGE HOLLOW</u>	<u>Entire length - tributary of Teeter Camp Run of Big Run of North Fork of the South Branch Potomac</u>	<u>1.2</u>
<u>PSB-28-EE-3-D</u>	<u>BUD HOLLOW</u>	<u>Entire length - tributary of Teeter Camp Run of Big Run of North Fork of the South Branch Potomac</u>	<u>0.9</u>
<u>PSB-28-EE-4</u>	<u>ELK RUN</u>	<u>Entire length - tributary of Big Run of North Fork of the South Branch Potomac</u>	<u>3.9</u>
<u>PSB-28-G</u>	<u>ZEKE RUN</u>	<u>Entire length - tributary of North Fork of South Branch Potomac</u>	<u>3.7</u>
<u>PSB-28-GG-1</u>	<u>VANCE RUN</u>	<u>Entire length - tributary of Laurel Fork of North Fork of South Branch Potomac</u>	<u>3.3</u>
<u>PSB-28-GG-1-A</u>	<u>SAMS RUN</u>	<u>Entire length - tributary of Vance Run of Laurel Fork of North Fork of South Branch Potomac</u>	<u>1.1</u>
<u>PSB-28-GG-1-B</u>	<u>LITTLE LOW PLACE HOLLOW</u>	<u>Entire length - tributary of Vance Run of Laurel Fork of North Fork of South Branch Potomac</u>	<u>1.1</u>
<u>PSB-28-I</u>	<u>POWDERMILL RUN</u>	<u>Entire length - tributary of North Fork of South Branch Potomac</u>	<u>2.8</u>
<u>PSB-28-K</u>	<u>SENECA CREEK</u>	<u>Headwaters (Slab Camp Run) to mouth - tributary of North Fork of South Branch Potomac</u>	<u>20.3</u>
<u>PSB-28-K-1</u>	<u>BRUSHY RUN</u>	<u>Entire length - tributary of Seneca Creek</u>	<u>7.8</u>
<u>PSB-28-K-2</u>	<u>ROARING CREEK</u>	<u>Entire length - tributary of Seneca Creek</u>	<u>6.1</u>
<u>PSB-28-K-2-B</u>	<u>LONG RUN</u>	<u>Beginning at the N/S Forks downstream to mouth - tributary of Roaring Creek of Seneca Creek</u>	<u>2.2</u>
<u>PSB-28-K-3</u>	<u>HORSECAMP RUN</u>	<u>Headwaters to mouth - tributary of Seneca Creek</u>	<u>4.1</u>
<u>PSB-28-K-3-B</u>	<u>WAMSLEY RUN</u>	<u>Entire length - tributary of Horsecamp Run of Seneca Creek</u>	<u>1.5</u>
<u>PSB-28-K-4</u>	<u>STRADER RUN</u>	<u>Entire length - tributary of Seneca Creek</u>	<u>2.6</u>
<u>PSB-28-K-6</u>	<u>WHITES RUN</u>	<u>Entire length - tributary of Seneca Creek</u>	<u>3.9</u>
<u>PSB-28-K-6-B</u>	<u>UPPER GULF RUN</u>	<u>Entire length - tributary of Whites Run of Seneca Creek</u>	<u>2.7</u>
<u>PSB-28-R</u>	<u>BLIZZARD RUN</u>	<u>Section from headwaters downstream to within 0.5 miles of mouth - tributary of North Fork of South Branch Potomac</u>	<u>3.1</u>
<u>PSB-28-S</u>	<u>BRIERY GAP RUN</u>	<u>Entire length - tributary of North Fork of South Branch Potomac</u>	<u>2.7</u>

<u>PSB-28-T</u>	<u>LAUREL RUN</u>	<u>Entire length - tributary of North Fork of South Branch Potomac</u>	<u>2.7</u>
<u>PSB-29</u>	<u>REDMAN RUN</u>	<u>Entire length - tributary of South Branch Potomac</u>	<u>3.4</u>
<u>PSB-30</u>	<u>LONG RUN</u>	<u>Entire length - tributary of South Branch Potomac</u>	<u>2.9</u>
<u>PSB-32</u>	<u>BRIGGS RUN</u>	<u>Entire length - tributary of South Branch Potomac</u>	<u>4.6</u>
<u>PSB-33</u>	<u>REEDS CREEK</u>	<u>From headwater downstream to the convergence of Long Hollow - tributary of South Branch Potomac</u>	<u>11.2</u>
<u>PSB-47</u>	<u>THORN CREEK</u>	<u>Begins at forks of Blackthorn Creek and Whitethorn Creek to mouth - tributary of South Branch Potomac</u>	<u>9.1</u>
<u>Shenandoah River Watershed (Hardy County)</u>			
<u>SNF-1</u>	<u>CAPON RUN</u>	<u>Headwater section downstream to Hunkerson Gap - Tributary of the Shenandoah River</u>	<u>2.2</u>

APPENDIX B

**ANTIDEGRADATION IMPLEMENTATION PROCEDURES
INTERGOVERNMENTAL COORDINATION AGENCIES**

STATE AGENCIES

Bureau of Commerce

Department of Natural Resources
Division of Forestry
Development Office

Department of Health and Human Resources

Bureau for Public Health

Bureau of the Environment

Department of Environmental Protection - all offices

Department of Agriculture

Soil Conservation Agency

Department of Transportation

Division of Highways

FEDERAL AGENCIES

US Environmental Protection Agency, Region III

US Fish and Wildlife Service

US Army Corps of Engineers

US Forest Service

US Office of Surface Mining

APPENDIX C

Initial Presumptive Listing for Tier 2.5

<u>DNR CODE</u>	<u>STREAM NAME</u>	<u>LENGTH (miles)</u>
Tug Fork Watershed		
BST-60-D	CUB BRANCH	0.72
BST-60-E	GEORGE BRANCH	3.79
BST-60-F	CRANE CREEK	1.22
BST-60-G	HURRICANE BRANCH	2.99
BST-60-H-2	WHITE OAK BRANCH	1.78
BST-70-N	LITTLE SLATE CREEK	3.42
BST-70-U-1	BIG BRANCH	1.86
BST-70-W	JACOBS FORK	10.50
BST-70-Z	YALL CREEK	2.31
BST-76-E	DAY CAMP BRANCH	1.67
BST-99	ELKHORN CREEK	8.41
		38.68 total miles
James River Watershed		
J-1-A	EWING RUN	2.64
J-1-C	NORTH FORK	5.88
J-2	SWEET SPRINGS CREEK	6.10
J-3	COVE CREEK	6.66
		21.27 total miles
Kanawha River Watershed (Upper & Lower)		
K-13	LITTLE SIXTEEN MILE CREEK	4.45
K-14-B-1	UNT OF FIVE FORK BRANCH	1.87
K-39-E-3	BAYS BRANCH	1.89
K-39-M-1	HOFFMAN HOLLOW	2.32
K-39-O	SHREWSBURY HOLLOW	1.54
K-76	LOOP CREEK	19.98
		32.06 total miles
Coal River Watershed		
KC-10-22	WHITE OAK BRANCH	2.08
KC-31-B	HOPKINS FORK	8.95

11.03 total miles

Elk River Watershed

KE	ELK RIVER	5.00
KE-102-A	CAMP CREEK	14.19
KE-111-K	SUGAR CREEK	10.51
KE-111-K-2	LITTLE SUGAR CREEK	7.61
KE-117-B	RIGHT FORK	13.60
KE-118	BERGOO CREEK	8.19
KE-127	BIG RUN	2.53
KE-129	VALLEY FORK	2.68
KE-133	DRY FORK	3.80
KE-135	BIG RUN	1.94
KE-136	PROPS RUN	1.38
KE-137	LAUREL RUN	2.63
KE-138	BIG SPRING FORK	9.67
KE-138-B	CUP RUN	2.02
KE-139-5A	SLATY FORK	4.79
KE-139-B	CROOKED FORK	2.51
KE-14-P	PANTHER HOLLOW	1.55
KE-50-B-10	IKK FORK	1.88
KE-50-I	ROCK CAMP RUN	6.66
KE-76-L-5	TUG FORK	3.83
KE-76-O	POPLAR CREEK	6.29
KE-76-U	JOHNSON BRANCH	2.44
KE-98-B-16	DESERT FORK	4.97
KE-98-C	LEFT FORK	5.73
KE-98-C-1	LAUREL PATCH RUN	1.51
KE-98-C-11	LAUREL FORK	5.59
KE-98-C-14	FALL RUN	6.06
KE-98-C-15	BIG RUN	3.79
KE-98-C-1-A	LONG FORK	2.56
		145.90 total miles

Gauley River Watershed

KG	GAULEY RIVER	26.56
KG-19-A	DOGWOOD CREEK	5.08
KG-19-G	ANGLINS CREEK	12.77
KG-19-J	BRACKENS CREEK	6.55

KG-19-U-1	BROWN CREEK	3.19
KG-19-U-2-C	OLD FIELD BRANCH	2.88
KG-19-U-2-D	JOB KNOB BRANCH	3.85
KG-19-V-5	LAUREL CREEK	3.61
KG-19-V-7	KUHN BRANCH	1.91
KG-20	COLLISON CREEK	4.98
KG-24	HOMINY CREEK	23.40
KG-24-E	GRASSY CREEK	5.68
KG-24-E-2	BRUSHY MEADOW CREEK	5.23
KG-24-J	PRICE FORK	2.83
KG-26-K	BRUSHY FORK	5.53
KG-32-J	CRANES NEST RUN	2.26
KG-34-B	COAL SHEDDING RUN	1.50
KG-34-E	LAUREL CREEK	9.18
KG-34-E-11	MIDDLE BRANCH	3.34
KG-34-E-13	COLD SPRING BRANCH	1.71
KG-34-E-3	SPRING RUN	1.52
KG-34-E-8	BEECH RUN	3.08
KG-34-E-9	HOGG CAMP RUN	2.55
KG-34-F	LITTLE LAUREL CREEK	9.87
KG-34-F-2	IMPROVEMENT BRANCH	1.86
KG-34-G	SOUTH FORK	7.21
KG-34-G-10	COLD KNOB FORK	5.60
KG-34-G-13	BIG RUN	1.44
KG-34-G-5	ELK LICK RUN	2.10
KG-34-G-6	ROCKY RUN	3.54
KG-34-G-8	BECKY RUN	2.56
KG-34-H	NORTH FORK	16.37
KG-34-H-14	BEAR RUN	2.21
KG-34-H-4	HUNTERS RUN	3.09
KG-34-H-5	COATS RUN	1.08
KG-34-H-9	ARMSTRONG RUN	1.24
KG-45-BIG	LAUREL CREEK	6.56
KG-57	MILLER MILL RUN	4.37
KG-58	LAUREL CREEK	2.07
KG-59	BIG RUN	1.32
KG-5-F-3	BEARPEN FORK	1.27
KG-5-H	ASH FORK	3.09
KG-5-J	NEEL BRANCH	2.65

KG-6	RICH CREEK	6.74
KG-60	TURKEY CREEK	4.86
KG-61	HUGHES RUN	2.79
KG-65	WILLIAMS CAMP RUN	1.66
KG-67	STRAIGHT CREEK	1.83
KG-70	BIG RUN	3.22
KG-72	MIDDLE FORK	1.96
KG-73	NORTH FORK	3.29
KG-8	GRANBERRY RIVER	38.39
KG-14	LICK BRANCH	1.22
KG-15	HANGING ROCK BRANCH	1.24
KG-19	DOGWAY FORK	8.75
KG-21	BIRCH LONG RUN	2.18
KG-23-E	CHARLES CREEK	2.59
KG-24-C	LEFT FORK	1.52
KG-3	JAKEMAN RUN	2.06
KG-4	BARRENSHE RUN	4.59
KG-7	BEE RUN	1.57
KG-8	FOXTREE RUN	1.56
KG-9	ALDRICH BRANCH	1.25
KGW	WILLIAMS RIVER	34.70
KGW-1	CRAIG RUN	2.00
KGW-19	UPPER BANNOCK SHOALS RUN	1.83
KGW-2	JONATHAN RUN	1.38
KGW-20	TEA CREEK	5.96
KGW-20-A	LICK CREEK	1.82
KGW-21	SUGAR CREEK	3.63
KGW-22	LITTLE LAUREL CREEK	2.47
KGW-25	DAY RUN	3.08
KGW-26	BLACK MOUNTAIN RUN	1.65
KGW-27	MOUNTAIN LICK RUN	2.11
KGW-3	SAWYER RUN	1.33
KGW-4	SPICE RUN	1.81
KGW-8	WHITE OAK FORK	2.14
KGW-9	LICK BRANCH	1.43
		379.30 total miles

New River Watershed (Upper & Lower)

KN-17	MANING CREEK	3.37
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KN-18	EPHRAIM CREEK	4.22
KN-23	BUFFALO CREEK	2.41
KN-24	SLATER CREEK	5.08
KN-26	PINEY CREEK	16.91
KN-26-B	FAT CREEK	6.56
KN-27	LAUREL CREEK	12.37
KN-27-C	CHESTNUT KNOB FORK	3.54
KN-29	GLADE CREEK	5.76
KN-29-E	PINCH CREEK	5.71
KN-32	MEADOW CREEK	2.59
KN-37	FALL BRANCH	1.93
KN-51-O	TURKEY CREEK	9.19
KN-61	RICH CREEK	2.85
KNB-12-B	LAUREL CREEK	4.86
KNB-13	CAMP CREEK	9.29
KNB-13-D	MASH FORK	2.91
KNB-13-G	SENG BRANCH	1.48
KNB-3	LITTLE BLUESTONE RIVER	4.73
KNB-30	CRANE CREEK	5.40
		111.16 total miles

Greenbrier River Watershed

KNG	GREENBRIER RIVER	25.30
KNG(S)-1	MILLIGAN CREEK	5.71
KNG(S)-2-B	FLYNN CREEK	4.27
KNG(S)-3-A	BURNS RUN	4.08
KNG-23	SECOND CREEK	6.06
KNG-28	ANTHONY CREEK	15.70
KNG-28-D	LITTLE CREEK	8.08
KNG-28-P-1	LAUREL RUN	4.20
KNG-28-Q-2	TWOMILE RUN	1.55
KNG-47	BEAVER CREEK	8.18
KNG-49	SWAGO CREEK	3.77
KNG-53-G	BARCLAY RUN	1.71
KNG-53-H	DOUTHAT CREEK	9.02
KNG-60	LAUREL RUN	3.00
KNG-66-D	SHOCK RUN	4.46
KNG-66-H-2	LEFT PRONG	3.29
KNG-68	DEER CREEK	8.75

KNG-68-A	NORTH FORK	10.73
KNG-68-A-3	SUTTON RUN	1.60
KNG-68-A-4	TACKER FORK	2.46
KNG-68-A-5	BLACK RUN	2.43
KNG-68-A-6	ELLEBER RUN	3.08
KNG-68-A-6-A	GRIFFIN RUN	1.69
KNG-70	LEATHERBARK RUN	4.69
KNG-74	TROUT RUN	1.14
KNG-75	ALLEGHENY RUN	5.33
KNG-77	ELK CREEK	2.56
KNG-78	EAST FORK	19.87
KNG-78-A	JOHNS RUN	2.21
KNG-78-C	LITTLE RIVER	6.28
KNG-78-G	FIVEMILE HOLLOW	2.29
KNG-78-H	POCA RUN	2.73
KNG-78-H-1	LONG RUN	2.85
KNG-78-K	MULLENAX RUN	2.92
KNG-78-L	ABES RUN	2.65
KNG-79	WEST FORK	17.68
KNG-79-B	FILL RUN	1.91
KNG-79-C	LITTLE RIVER	7.59
KNG-79-C-1	SPAN OAK RUN	2.32
KNG-79-C-2	CLUBHOUSE RUN	11.02
KNG-79-C-3	HINKLE RUN	10.41
		245.59 total miles

Little Kanawha River Watershed

LK-111	LAUREL RUN	6.04
LK-131	GETOUT RUN	3.01
LK-86-E-4	PINE RUN	1.57
LK-95-L	CARPENTER FORK	5.04
		15.66 total miles

Cheat River Watershed

MC-12-A	LAUREL RUN	6.13
MC-12-B-3	HOG RUN	4.42
MC-12-B-6	MILL RUN	3.95
MC-18	ROARING CREEK	8.03
MC-1-A	RYAN HOLLOW	2.33

MC-20	ELSEY RUN	3.40
MC-2-A	DARNELL RUN	2.08
MC-33-A	FLAG RUN	5.51
MC-36	WOLF CREEK	6.90
MC-41	LONG RUN	1.22
MC-45	TOBES RUN	1.16
MC-46-B	RIGHT FORK	3.80
MC-47	JOHNATHAN RUN	1.86
MC-50	UPPER JOHNATHAN RUN	2.53
MC-51	CLOVER RUN	1.34
MC-51	LEFT FORK	9.16
MC-51-A	RIGHT FORK	5.45
MC-51-B	INDIAN FORK	4.16
MC-52	MINER RUN	6.63
MC-52-0.7	BRIDGE RUN	1.12
MC-52-A	ROARING RUN	2.12
MC-53	DRY RUN	2.73
MC-54	HORSESHOE RUN	15.55
MC-54-A	MIKE RUN	3.86
MC-54-C	MAXWELL RUN	2.92
MC-54-D	HYLE RUN	3.92
MC-54-E	LICK DRAIN	1.79
MC-54-F	LAUREL RUN	2.87
MC-54-G	LYNN RUN	1.33
MC-54-H	THUNDERSTRUCK RUN	3.89
MC-54-I	LEADMINE RUN	4.81
MC-54-I-1	LIME HOLLOW RUN	1.14
MC-54-J	WOLF RUN	1.80
MC-54-K	TWELVEMILE RUN	2.25
MC-55	DRY RUN	3.19
MC-56	MILL RUN	4.77
MC-57	WOLF RUN	1.90
MC-60	DRY FORK	3.76
MC-60-A	ROARING RUN	0.77
MC-60-C	ELK LICK RUN	4.52
MC-60-C-3	JOHN B. HOLLOW	1.12
MC-60-D-10	SAND RUN	3.19
MC-60-D-11	YOAKUM RUN	2.48
MC-60-D	LOWER BLACKWATER RIVER	2.62

MC-60-G	RED RUN	5.56
MC-60-I	MILL RUN	2.92
MC-60-J	ELK LICK RUN	2.59
MC-60-K	GLADY FORK	31.31
MC-60-K-1	THREE SPRING RUN	1.25
MC-60-K-11	MCCRAY CREEK	2.41
MC-60-K-15	DANIELS CREEK	3.18
MC-60-K-16	WEST FORK GLADY FORK	6.13
MC-60-K-16	WEST FORK GLADY FORK	4.27
MC-60-K-17	EAST FORK GLADY FORK	7.28
MC-60-K-17-A	LOUK RUN	1.19
MC-60-K-2	PANTHER CAMP RUN	1.73
MC-60-K-2-A	HOG RUN	1.17
MC-60-K-4	FIVE LICK CREEK	1.71
MC-60-K-5	WOODFORD RUN	1.14
MC-60-K-6	BAKER CAMP RUN	1.19
MC-60-L	BIG RUN	3.69
MC-60-N	LAUREL FORK	21.52
MC-60-N-4	BEAVERDAM RUN	2.12
MC-60-N-8	FIVE LICK RUN	2.45
MC-60-O	RED CREEK	6.77
MC-60-O-1	BIG RUN	3.47
MC-60-O-2	FLAT ROCK RUN	2.89
MC-60-O-3	GANDY RUN	2.26
MC-60-P	SPRUGE RUN	3.25
MC-60-Q	HORSECAMP RUN	4.59
MC-60-R	TORY CAMP RUN	2.43
MC-60-T	GANDY CREEK	15.68
MC-60-T-1	LOWER TWO SPRING RUN	2.29
MC-60-T-10	NARROW RIDGE RUN	2.16
MC-60-T-11	WARNER RUN	2.21
MC-60-T-2	UPPER TWO SPRING RUN	2.53
MC-60-T-3	SWALLOW ROCK RUN	1.82
MC-60-T-6	TAYLOR RUN	0.87
MC-60-T-8	BIG RUN	3.75
MC-60-T-9	GRANTS BRANCH	2.80
MCS	SHIVERS FORK	7.26
MCS-12	LITTLE LAUREL RUN	1.31
MCS-13	LITTLE BLACK RUN	4.74

MCS-14	CLIFTON RUN	2.11
MCS-15	RATTLESNAKE RUN	5.03
MCS-16	JOHNS RUN	2.70
MCS-2	HAWK RUN	1.09
MCS-22	TAYLOR RUN	2.97
MCS-22-A	STALNAKER RUN	1.61
MCS-28	UPPER POND LICK	6.29
MCS-3	HADDIT RUN	2.68
MCS-33	FISHING HAWK CREEK	3.60
MCS-3-A	SOUTH BRANCH	3.56
MCS-4	JOBS RUN	1.72
MCS-40	YOKUM RUN	2.56
MCS-43	GLADE RUN	2.67
MCS-46	RED RUN	2.75
MCS-47	BLISTER RUN	1.95
MCS-48	FISH HATCHERY RUN	2.66
MCS-49	LAMBERT RUN	3.23
MCS-5	LAUREL RUN	3.48
MCS-50	FIRST FORK	5.42
MCS-54	BEAVER CREEK	1.74
MCS-55	SECOND FORK	4.15
MCS-57	BLACK RUN	2.28
MCS-6	PLEASANT RUN	3.52
MCS-6-B	AARONS RUN	2.35
MCS-7	STONE LICK RUN	1.68
MCS-8	LAUREL RUN	1.18
MCS-9	NAIL RUN	1.74
		415.11 total miles

Tygart River Watershed

MT-18-E-5-B	FROG RUN	2.36
MT-23-F	MILL RUN	4.03
MT-23-H	MILL RUN	3.72
MT-38	ZEBB CREEK	4.04
MT-44	MATHEUS RUN	1.66
MT-45-C	RIGHT FORK	3.24
MT-47	BEAVER CREEK	6.20
MT-50-A	RIGHT FORK OF FILES CREEK	8.33
MT-50-A-1	LIMEKILN RUN	2.12

MT-50-B	LEFT FORK FILES CREEK	2.84
MT-61	SHAYERS RUN	6.95
MT-64	MILL CREEK	10.69
MT-64-C	GLADE RUN	1.59
MT-64-E	MEATBOX RUN	1.19
MT-64-F	POTATOHOLE FORK	1.84
MT-66	RIFFLE CREEK	1.91
MT-66-B	MCGEE RUN	3.40
MT-66-C	BACK FORK	2.01
MT-67	RAFE RUN	1.54
MT-68	BECKY CREEK	9.41
MT-68-A	DIG BRANCH	2.25
MT-72	HAMILTON RUN	2.49
MT-73	CLAY RUN	2.61
MT-74	ELK WATER FORK	5.20
MT-74-A	MOWRY RUN	2.34
MT-74-B	LIMEKILN RUN	1.93
MT-75	STEWART RUN	8.08
MT-77	CONLEY RUN	7.10
MT-78	RALSTON RUN	6.99
MT-79	WINDY RUN	4.60
MT-80	LOGAN RUN	2.49
MT-81	BIG RUN	5.14
MTB-25-A	RIGHT FORK	3.88
MTB-27	PANTHER FORK	4.08
MTB-28	BIG RUN	3.03
MTB-31	RIGHT FORK	2.24
MTB-31-B	REGER RUN	1.13
MTB-31-C	ALEC RUN	1.93
MTB-31-D	MILLSITE RUN	3.76
MTB-32	LEFT FORK	6.85
MTB-32-D	BEARCAMP RUN	5.00
MTB-32-H	BEECH RUN	4.62
MTM	MIDDLE FORK RIVER	7.32
MTM-1	HANGING RUN	4.68
MTM-11	RIGHT FORK MIDDLE FORK RIVER	7.42
MTM-11-D	JACKSON FORK	3.88
MTM-11-E	JENKS FORK	3.70
MTM-13	LONG RUN	7.66

MTM-16	CASSITY FORK	4.25
MTM-16-A	PANTHER RUN	4.43
MTM-21	PLEASANT RUN	1.82
MTM-22	LAUREL RUN	2.57
MTM-23	LAUREL BRANCH	4.00
MTM-24	SUGAR RUN	2.30
MTM-25	SCHOOLCRAFT RUN	3.08
MTM-25-A	BIRCH FORK	1.48
MTM-26	BIRCH FORK	3.56
MTM-27	MITCHELL LICK FORK	2.52
		231.49 total miles

Upper Ohio North

O-102-A	WHITE OAK RUN	0.48
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Twelvepole Creek Watershed

O-2-H-2-A	STOWERS BRANCH	0.46
O-2-P-23	ARKANSAS BRANCH	0.75
O-2-P-25	SWEETWATER BRANCH	2.00
O-2-P-26	LONG BRANCH	2.59
O-2-P-27	SPRUCE FORK	1.84
O-2-Q-14	RICH CREEK	1.32
O-2-Q-16	BLUE LICK BRANCH	2.28
O-2-Q-18-A	LITTLE LAUREL CREEK	2.09
		13.33 total miles

Upper Ohio South

O-77-B	LONG RUN	4.51
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Guyandotte River Watershed

GG-102	BRICKLE BRANCH	1.64
GG-29-C	HORSESHOE BRANCH	1.98
GG-32-F	PLUM BRANCH	2.35
GG-34-E	STEER FORK	1.64
GG-37	LITTLE UGLY CREEK	1.42
GG-38	BIG UGLY CREEK	8.49
GG-38-A	PIGEON ROOST CREEK	3.62
GG-38-D	LAUREL CREEK	2.60
GG-61	BUFFALO CREEK	3.01

OG-96-A	STURGEON BRANCH	1.57
OGM-8-B	LEFT FORK	2.75
		31.06 total miles

Potomac Direct Drains Watershed

P-16	ROCKWELL RUN	10.39
P-9-G-1	NORTH FORK INDIAN RUN	1.49
P-9-G-2	SOUTH FORK INDIAN RUN	3.76
		15.63 total miles

Cacapon River Watershed

PG-0-9	CONOR HOLLOW	7.73
PG-1	CONSTANT RUN	5.23
PG-10	EDWARDS RUN	7.00
PG-17	HAWK RUN	4.62
PG-23	TROUT RUN	16.62
PG-24-H	LOWER COVE RUN	4.63
		45.83 total miles

North Branch / Potomac River Watershed

PNB-14	HOWELL RUN	3.83
PNB-15	DEEP RUN	4.75
PNB-15-A	GRANBERRY RUN	2.66
PNB-16-B	WYCKOFF RUN	2.43
PNB-18	DIFFICULT CREEK	5.17
PNB-18-B-1	JOHNNYCAKE RUN	3.28
		22.11 total miles

South Branch / Potomac River Watershed

PSB-13	MILL RUN	8.95
PSB-21-F	DUMPLING RUN	2.60
PSB-21-K	ROUGH RUN	6.92
PSB-25-C-2	SPRING RUN	2.98
PSB-28-A-1	BIG RUN	2.61
PSB-28-A-2	LAUREL RUN	3.17
PSB-28-B	SAMUEL RUN	2.85
PSB-28-C	BROAD RUN	2.39
PSB-28-D	MOYER FORK	7.92
PSB-28-E	HIGH RIDGE RUN	2.28
PSB-28-EE	BIG RUN	12.84
PSB-28-EE-2	SAWMILL BRANCH	3.22

PSB-28-EE-2-A	BACK RUN	3.39
PSB-28-EE-3	TEETER CAMP RUN	3.71
PSB-28-EE-3-A	HEMLOCK RUN	1.91
PSB-28-EE-3-B	LEONARD SPRING HOLLOW	4.64
PSB-28-EE-3-C	MIDDLE RIDGE HOLLOW	4.81
PSB-28-EE-3-D	BUD HOLLOW	3.54
PSB-28-EE-4	ELK RUN	3.93
PSB-28-G	ZEKE RUN	3.70
PSB-28-GG-1	VANCE RUN	3.27
PSB-28-GG-2	SAMS RUN	1.10
PSB-28-GG-2-A	LITTLE LOW PLACE HOLLOW	1.10
PSB-28-I	POWDERMILL RUN	2.84
PSB-28-K	SENECA CREEK	20.26
PSB-28-K-1	BRUSHY RUN	7.79
PSB-28-K-2	ROARING CREEK	6.13
PSB-28-K-2-B	LONG RUN	2.23
PSB-28-K-3	HORSECAMP RUN	4.06
PSB-28-K-3-B	WAMSLEY RUN	1.52
PSB-28-K-4	STRADER RUN	2.56
PSB-28-K-5	GULF RUN	1.46
PSB-28-K-6	WHITES RUN	3.86
PSB-28-K-6-A	LOWER GULF RUN	4.67
PSB-28-K-6-B	UPPER GULF RUN	2.67
PSB-28-R	BLIZZARD RUN	3.60
PSB-28-S	BRIERY GAP RUN	2.65
PSB-28-T	LAUREL RUN	2.74
PSB-29	REDMAN RUN	3.41
PSB-30	LONG RUN	2.88
PSB-32	BRIGGS RUN	4.57
PSB-33	REEDS CREEK	11.16
PSB-40	PETERS RUN	5.08
PSB-47	THORN CREEK	9.08
PSB-9	MILL CREEK	25.38
		224.40

Shenandoah River Watershed (Hardy County)

S-9-A	CAPON RUN	2.19
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Total number of streams 444

Total Miles 2006.80

West Virginia Department of Environmental Protection

ADVISORY COUNCIL MEETING MINUTES

Wednesday - May 31, 2006

1:00 p.m. -- 3:00 p.m.

601 57th Street, SE, Charleston, WV

West Virginia Room – 3rd Floor

ATTENDEES:

Advisory Council Members:

Larry Harris

Jackie Hallinan

Rick Roberts

Bill Raney (via conference call)

Karen Price

DEP:

Stephanie R. Timmermeyer, Cabinet Secretary

Randy Huffman, Deputy Cabinet Secretary/Director –Division of Mining & Reclamation

Heather A. Connolly, General Counsel

Karen G. Watson, Assistant General Counsel

Ken Ellison, Director - Division of Land Restoration

Lisa McClung, Director – Division of Water and Waste Management

John Benedict, Director – Division of Air Quality

Mike Zeto, WVDEP

Charlie Sturey, WVDEP

Lalena Price, Acting Chief Communication Officer – WVDEP – Public Information Office

James Martin, Chief, WVDEP - Office of Oil & Gas

Jim Mason – WVDEP

Bill Brannon – WVDEP

Carroll Cather – WVDEP

Terrie Sangid – WVDEP

Scott Mandirola – WVDEP

Cliff Whyte – WVDEP

John Morgan – WVDEP

Gary Rogers – WVDEP

Mike Dorsey – WVDEP

Patrick Campbell – WVDEP

Ken Politan – WVDEP

Pam Nixon – WVDEP

VISITORS:

Don Garvin – WVEC
Allan S. Tweddle – WVEC
Adam Webster – WVRC
Tim Mallan – Appalachian Power
Steve Keen – Bright Enterprises
Charlie Burd – IOGA – WV
Tom Boggs – WV Chamber

Stephanie R. Timmermeyer, Cabinet Secretary - West Virginia Department of Environmental Protection called the meeting to order at 1:00 p.m. Secretary Timmermeyer apologized for short time period with some of the rules getting out to Council.

Proposed rules for the 2007 legislative session are as follows:

60CSR5 – Antidegradation Implementation Procedures

SUMMARY

Antidegradation is a requirement of the federal Clean Water Act intended to preserve the existing quality of the State's waters and to prevent and/or minimize future degradation. The rule was first adopted in 2001 and establishes four levels, or tiers, of protection of State waters, Tiers 1,2,2.5 and 3. Each tier provides a graduated level of protection used during the NPDES permit issuance process.

COMMENTS

Secretary Timmermeyer - Procedural History – 444 Streams to 303 - 3.7% of total WV stream miles.

5.6.d. Are these absolute values (§5.6.d 1-4 of rule)?

Yes

Will there be another comment period after filing with Secretary of State's Office?

Yes

Is this the final list?

Yes

So §6.2 is gone?

Yes

Legislature has to approve the Tier 2.5 list according to the law passed last session.

How do we appeal a stream's inclusion on Tier 2.5 list?

9.6 – Not appealable to the board, delisting a stream would require a change by the legislature through a rule change.

Since rulemaking authority has been taken from EQB how do you appeal?

This is like any other rule, EQB has no appellate jurisdiction.

When does it go into effect?

If the Legislature passes the list, we send it to EPA for approval, then it would be effective for reissuance, modifications, and 1st time issuances.

47CSR2 – Requirements Governing Water Quality Standards

SUMMARY

This rule establishes requirements governing surface water quality standards for the waters of the State and establishes standards of purity and quality consistent with public health and the enjoyment thereof, the protection of animal, aquatic and plant life and the expansion of employment opportunities, agricultural expansion and a foundation for healthy industrial development.

COMMENTS

Secretary Timmermeyer – Overview of nutrients criteria, EPA approved old (46CSR1) Aluminum Standard. Also includes updated list of trout waters.

How were trout streams added?

We relied on DNR's data to come up with the list.

Was it a scientific study or did it include streams where trout are stocked?

The stream must be able to allow trout to survive over time. This does sometimes include stocked streams.

Has problem with some streams listed, believes they are not reproducing streams, simply stocked, wants to see method of gathering data for list

The list is not final, DEP will continue to regulate facilities on such streams. DEP will add and subtract streams as data becomes available.

6 streams are being taken off in this rule because they cannot support trout over time.

How recent are DNR's survey's?

The surveys range from 1975 to present.

We have to maintain waters that "previously sustained trout."

Where is Watershed at in definition?

When permits are issued they are looked at on a case by case basis to assess impact on downstream waters within a watershed (downstream usage protection.)

There is no definition of "water body" in State Code, only "Waters."

33CSR9 - Standards for Beneficial Use of Filtrate From Water Treatment Plants

SUMMARY

This legislative rule establishes a mechanism and requirements for the certification, permitting, siting, bonding, and use of water treatment plant sludge from water treatment plants that has beneficial properties. This rule applies to the beneficial use of water treatment plant sludge and to any person who seeks approval from the Secretary to beneficially use such sludge within the state. This rule is intended to enhance the resource recovery and recycling goals of article fifteen of chapter twenty-two of the West Virginia Code and to encourage the beneficial use of water treatment plant filtrate. Section 22-15-23 of the West Virginia Code and this rule, and not the provisions of W. Va. Code § 22-15-10 or 33 CSR 1, shall govern the beneficial use of water treatment plant sludge. This rule does not apply to sewage sludge, products derived from sewage sludge, sludges regulated under 33 CSR 8, or materials regulated as hazardous waste under W. Va. Code §§22-18-1, et seq.

COMMENTS

Can we give an example?

Such filtrate could have been considered Hazardous Waste in the past, this rule allows for certain applications.

47CSR5A – Rules for Individual State Certification of Activities requiring a Federal Permit

SUMMARY

The proposed amendments to this rule are being made to adopt into rule requirements that have been applied through past practices for coal related activities requiring mitigation and issuance of a 401 State Certification of a 404 Permit. Ratios for monetary compensation for temporary impacts are detailed. Monetary compensation for permanent impacts to wetlands

from coal related activities are made the same as non-coal related. Additional economic and stream measurement information is being requested to be added to the 401 application.

COMMENT

Does this apply to any other industry?

No, it is only coal related.

Wants to know if other industry has similar regs?

Seems contrary to what we submit to Army Corp. We want consistency across all forums. Is this different?

No, it is information contained in other forms.

4.2.f.a WV. Jobs creation

Coal companies are already submitting this information to Coal Development. We use this information so we need to see it too.

Is it on a timeframe? – Can coal meet with DEP?

Secretary Timmermeyer suggested we have another Advisory Council Meeting to give the council additional time to review certain rules.

Bill Raney agrees with Secretary Timmermeyer for the need for another meeting to address some of the rules.

The next Advisory Council Meeting will be scheduled before June 20, 2006.

58CSR5 – Recycling Assistance Grant Program

SUMMARY

Updates and streamlines recycling grant requirements. Establishes rule definitions. Consolidates the type of grants available. Simplifies the grant eligibility criteria. Clarifies uses of grant funding. Clarifies and restructures general conditions and requirements for an applicant and then for a grant recipient. Increases the maximum grant funding levels. Clarifies grant proposal content and submission requirements. Establishes agency review criteria and revises Recycling Assistance Fund Grant Review Committee.

COMMENT

Someone worked really hard on putting this together - Really thinks they did a great job.

The changes are a result of suggestions from grant recipients and the recycling community in general.

45CSR6 – Control of Air Pollution from Combustion of Refuse

SUMMARY

This rule establishes emission standards for particulate matter and requirements for activities involving incineration of refuse which are not subject to, or are exempted from regulation under various federal counterpart regulations for specific combustion source categories. This rule also prohibits (with limited exception) open burning and sets forth the registration, permitting, reporting, testing, emergency, natural disaster and exemption provisions for activities involving the combustion of refuse and land clearing debris.

COMMENT

Rule is just reorganizing and streamlining.

Wholesale look at air rules. Four decades old rule. Needed to take a look at its federal counterparts. We separated them (fed) into Rule 18. Rule 6 covers state regs. Streamlined. Did not change any limits. Left open burning and DOH jobs the same.

Both rules compared old “prevent and control” new “control” why drop the term “prevent” from the rule?

We don't prevent air pollution we control it. There is no other specific reason, DEP just cleaned up the title.

The federal government doesn't use the term “prevent” and we are trying to mirror their rules for consistency.

Does it involve timbering operations?

No.

60CSR3 – Voluntary Remediation and Redevelopment Rule

SUMMARY

The Voluntary Remediation Program proposed rule amendments focus on two primary areas: 1. Incorporating the Uniform Environmental Covenant Act provisions, and 2. Updating the DeMinimis Standard to incorporate recent changes in toxicological profiles posted by EPA for several constituents.

COMMENT

We're adopting Uniform Environmental Covenant Act. We'll have to adopt as they change. Same for DeMinimus Standards (developed by consultant in excel). We've updated the tox profiles.

No questions from Council.

45CSR25 – Control of Air Pollution from Hazardous Waste Treatment Storage and Disposal Facilities.

SUMMARY

This rule establishes and adopts emission standards for the treatment, storage and disposal of hazardous waste promulgated by the United States Environmental Protection Agency (U.S. EPA) pursuant to the Resource Conservation and Recovery Act, as amended (RCRA). This rule codifies general procedures and criteria to implement emission standards set forth in 40 CFR Parts 260, 261, 262, 264, 265, 266, 270 and 279, as listed in Table 25-A of the rule. The rule also adopts associated appendices, reference methods, performance specifications and other test methods which are appended to these standards. Any person who constructs, reconstructs, modifies or operates any hazardous waste treatment, storage, or disposal facility must comply with the West Virginia Hazardous Waste Management System, the codified federal emission standards, and this rule.

45CSR25 establishes a program of regulation over the treatment, storage, and disposal of hazardous wastes in order to achieve and maintain such levels of air quality as will protect the public health and safety and the environment from the effects of improper, inadequate, or unsound treatment, storage, or disposal of hazardous wastes.

This revised rule incorporates by reference the following provisions of 40 CFR Parts 260, 261, 264, 265, 266 and 270 promulgated as of June 1, 2006: National Emission Standards for Hazardous Air Pollutants: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I Final Replacement Standards and Phase II), Resource Conservation and Recovery Act Burden Reduction Initiative, and Waste Management System; Testing and Monitoring Activities, Methods Innovation Rule and SW-846 Final Update IIIB.

COMMENT

Revisions to this rule are necessary to maintain consistency with current federal regulations.

Only federal changes this year except for one definition on pathological incinerators.

No further questions.

199CSR1 – Surface Mining Blasting Rule

SUMMARY

These changes are proposed for clarification of definitions, jurisdiction for underground shaft and slope development, and training/educational requirements for pre-blast surveyors and certified blasters. None of which should have any fixcal impact on the state or public above those currently experiencing. Some additional training will be required by those doing pre-blast surveys, but that training will be offered for free by Explosives and Blasting.

COMMENT

Randy Huffman hit on highlight changes and cleanup for this rule:

3.2.c. 1000 ft requirement for seismograph

3.4. defines where DEP gives up regulatory authority as 40ft.

3.9 Pre blast surveyors training requirements.

Is this new or modified requirement?

Modified – Now requiring additional criteria. DEP/OEB is the approving authority. We offer procedural training only at DEP 4.1.b. Case by case certification for qualifying experience for initial certification.

Would that include the convicted felon requirements?

The convicted felon exclusion remains. Felons can't get a fire marshal's license, or a license from ATF.

Any provision for appeals on the convicted felon prohibition?

Not at this tme.

4.5.d – Show cause why you should be allowed in West Virginia when suspended or revoked in other states.

4.9. – Allows blasting inspector to issue suspension order on site if unsafe conditions exist. 24 hour appeal process. Concerned about air blast and fly rock incidents.

Grammatical errors must be changed before we go out to public notice.

Concerns: New definition for “Other structures” and “habitable dwelling”
Shaft and slope (40 ft)

Other structures or “Protective structure” can house people – habitable dwelling one that can house people (snowbird example)- “shaft and slope” DEP worked with miner's health and safety to develop the distance criteria.

We're (WVCA) probably fine with them.

Does OSM require it?

No. Geology and blast record 3.5 Safety concerns pre-blast surveyors, they don't have to be geologists, but they do need to know what they are blasting.

HOLD OVER FOR NEXT MEETING.

38CSR2 – Surface Mining Reclamation Rule

SUMMARY

38- 3.2.g. Notice of Technical Completeness is new language and is to provide the public an opportunity to review the application once technical review is completed. §38- 5.4.e.1 is removing language that is contrary to returning the natural drainway to its original pattern, profile, and dimensions once drainage control structure is removed. Changes to §38-2-6 removes duplication of rules for Blasting and after this change, all the requirements for blasting will be contained in Surface Mining Blasting Rule, Title 199 Series 1. Changes in §38-14.15.c.2, 14.15.d.1 and 14.15.d.3 are clarifying contemporaneous reclamation rules on excess spoil disposal. The changes in §38- 5.6 and 14.15 removes phase-in compliance schedules and the schedule in 14.15 has long past and the one in 5.6 is due to expire on June 19, 2006. §38-2-25 Coal Slurry Lines is new language and the term slurry as used in this subsection means any mixture of water and solids that are pumped to a disposal area. The purpose of this change is to minimize the potential and the impacts of slurry line spills by providing for secondary containment, monitoring etc.

COMMENT

Creates standards and requirements (§38-2-25) is a new section.

Public review period 3.2.g. – currently the public has no opportunity to comment on a completed application so this rule adds a 15 day comment period in certain circumstances.

Why delete the term “databases” specifically

Some of those databases don't exist. We have our own database now.

Has the current notification timeframe changed?

No, it is the same as using the existing spill line.

What about mining related spills?

Inspectors call spill line within 24 hour period. Companies should call immediately upon discovering a spill.

Is there anyway to sample water for slurry spills?

Currently DEP Inspectors take stream water samples and that data is on file.

Is there anything dangerous in the slurry to the public?

Not usually. We can get you data on existing samples.

Dialysis system are bothered by trace stuff in the water.

Coal fines are usually what kill fish, not the trace chemicals.

HOLD OVER FOR NEXT AC MEETING

47CSR30 – WV/NPDES RULES FOR COAL MINING FACILITIES

SUMMARY

The proposed amendments to this rule are being made to allow general clean-up of sections referencing outdated names of agencies and references to the EQB governing rule making. This rule addresses the Secretary as being the person as head of all actions. References to the "Director" are changed to "Secretary" to eliminate the need to distinguish between the Director of Mining and Reclamation and the Director of Water and Waste Management when issuing a coal related WV/NPDES permit. This rule adds provision for storm-water coverage for certain minimal activities without the requirement for modification through application to the permit. This rule also provides for an advanced approval of transfer of a WV/NPDES Permit to coincide with the advanced approval of the corresponding Article 3 Permit.

COMMENT

Eliminates need to do a NPDES modification permit in certain instances when adding area to an existing permitted area. Reduce paperwork and manpower.

Secretary can override rule when circumstances dictate. Also, there is a provision for advanced approval of a transfer permit in certain circumstances. Consistent with SMCRA.

Why would a permit area be expanded if not to extract minerals?

Haul roads, storage, etc.

Does this do away with any existing public comment period?

No. These small changes wouldn't require a hearing.

HOLD FOR NEXT MEETING.

35CSR3 – Coalbed Methane Wells Rule –

HOLD FOR NEXT MEETING

33CSR20 – Hazardous Waste Management

HOLD FOR NEXT MEETING

45CSR8 – Ambient Air Quality Standards

SUMMARY

The purpose of this rule is to establish ambient air quality standards for sulfur oxides, particulate matter, carbon monoxide, ozone, nitrogen dioxide and lead, equivalent to those national primary and secondary National Ambient Air Quality Standards (NAAQS) established by the U.S. EPA.

National primary ambient air quality standards define levels of air quality which the Administrator of the U.S. EPA judges are necessary, with an adequate margin of safety, to protect the public health. National secondary ambient air quality standards define levels of air quality which the Administrator of the U.S. EPA judges necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Such standards are subject to revision, and additional primary and secondary standards may be promulgated as the Administrator of the U.S. EPA deems necessary to protect the public health and welfare.

The Division of Air Quality (DAQ) is streamlining the regulatory structure by consolidating all of the NAAQS into one rule. Consequently, this rule will repeal and replace 45CSR9 - "Ambient Air Quality Standards for Carbon Monoxide and Ozone" which was filed on April 16, 2002 and became effective on July 1, 2002, and 45CSR12 - "Ambient Air Quality Standard for Nitrogen Dioxide" which was filed May 19, 2000, and became effective June 1, 2000.

COMMENT

This puts all NAAQS in one rule, acts to consolidate and streamline the rule.

Why do away with 2.2?

It's now in 3.1 and adopts federal standards.

Particulates are in this rule. Dr. Popper's (WVU) research shows that particulates damage kid's lungs developmentally and these standards are based on adults. Asthma on the increase and this might exacerbate our kids health.

The federal EPA is currently reviewing fine particulate matter and we will change our standards accordingly based on their rule changes.

45CSR16 – Standards of Performance for New Stationary Sources

SUMMARY

This rule establishes and adopts national standards of performance for new stationary sources and other regulatory requirements promulgated by the United States Environmental Protection Agency (U.S. EPA) pursuant to section 111(b) of the federal Clean Air Act, as amended (CAA). This rule codifies general procedures and criteria to implement standards of performance for new stationary sources set forth in 40 CFR Part 60. The rule also adopts associated appendices, reference methods, performance specifications and other test methods which are appended to such standards. Any person who constructs, modifies, reconstructs or operates an affected facility after the effective date of any NSPS under 40 CFR Part 60 must comply with the applicable NSPS and this rule.

This revised rule incorporates by reference the following new or revised NSPS standards promulgated as of June 1, 2006: Standards of Performance for: New and Existing Stationary Sources - Electric Utility Steam Generating Units; Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978, Industrial- Commercial- Institutional Steam Generating Units, Small Industrial- Commercial- Institutional Steam Generating Units; Stationary Gas Turbines.

COMMENT

Standard Update of fed requirements.

No Questions.

45CSR34 – Emission Standards for Hazardous Air Pollutants

SUMMARY

This rule establishes and adopts national emission standards for hazardous air pollutants (NESHAP) and other regulatory requirements promulgated by the United States Environmental Protection Agency (U.S. EPA) pursuant to section 112 of the federal Clean Air Act, as amended (CAA). This rule codifies general procedures and criteria to implement emission standards for stationary sources that emit, or have the potential to emit, one or more of the hazardous air pollutants set forth in section 112(b) of the CAA, or one or more of the eight substances listed as hazardous air pollutants in 40 CFR §61.01(a). The rule incorporates by reference the NESHAP standards of 40 CFR Parts 61, 63 and 40 CFR Part 65 (Consolidated Federal Air Rule), to the extent referenced in 40 CFR Parts 61 and 63, promulgated as of June 1, 2006. The rule also adopts associated appendices, reference methods, performance specifications and other test methods which are appended to these standards and contained in 40 CFR Parts 61 and 63. Any person who constructs, reconstructs, modifies or operates any source subject to the provisions of 40 CFR Parts 61 or 63 must comply with the applicable NESHAPS and this rule.

This rule will repeal and replace 45CSR15 "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 61" filed April 28, 2006 and effective June 1, 2006, as 45CSR34 will now include all federal NESHAPS under 40 CFR Parts 61 and 63.

The revised rule incorporates by reference the following new or revised NESHAP standards promulgated as of June 1, 2006: Miscellaneous Organic Chemical Manufacturing, Waste Management System; Testing and Monitoring Activities, Methods Innovation Rule and SW-846 Final Update IIIB, Cellulose Products Manufacturing, Primary Aluminum Reduction Plants, Cross-Media Electronic Reporting, Hazardous Waste Combustors (Phase I Final Replacement Standards and Phase II), Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j), Primary Copper Smelting, Coke Ovens: Pushing, Quenching, and Battery Stacks, Cellulose Products Manufacturing, Miscellaneous Organic Chemical Manufacturing, Secondary Aluminum Production, Brick and Structural Clay Products Manufacturing, Hazardous Waste Combustors, Exemption of Certain Area Sources From Title V Operating Permit Programs, List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List, Miscellaneous Coating Manufacturing, Industrial, Commercial, and Institutional Boilers and Process Heaters: Reconsideration, Surface Coating of Metal Cans, Refractory Products Manufacturing, Plywood and Composite Wood Products; List of Hazardous Air Pollutants, Lesser Quantity Designations, Source Category List, Miscellaneous Organic Chemical Manufacturing, Hazardous Waste Combustors, Hydrochloric Acid Production, Industrial Process Cooling Towers, Magnetic Tape Manufacturing Operations, Ethylene Oxide Emissions Standards for Sterilization Facilities, Refractory Products Manufacturing and General Provisions.

COMMENT

Standard update of fed requirements combining 45CSR____ and 45CSR16 into this rule. Will replace Rule 15.

No Questions.

45CSR39 – Control of Annual Nitrogen Oxides Emissions

SUMMARY

This rule establishes general provisions and the designated representative, permitting, allowance, monitoring, and opt-in provisions for the state CAIR NO_x Annual Trading Program pursuant to the federal Clean Air Interstate Rule (CAIR) under Section 110 of the Clean Air Act (CAA), 40 CFR Part 96, Subparts AA through II, and 40 CFR §51.123 for state implementation plans as a means of mitigating interstate transport of fine particulates and nitrogen oxides (NO_x).

This rule partially fulfills the State's obligations in response to the United States Environmental Protection Agency's (U.S. EPA) final rule, *Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NO_x SIP Call* (12 May 2005, at FR 25162). The federal rule requires that large emitters of NO_x reduce annual emissions through the constraint of set budgets. U.S. EPA is specifying that annual NO_x emission reductions be implemented in two phases. The first phase of NO_x reductions starts in 2009; the second phase starts in 2015, and continues thereafter. The NO_x emission reduction requirements are based on controls that are

known to be highly cost effective for electric generating units. Flexibility is built in through market-based “cap and trade” provisions which allow sources to buy or sell NO_x emission allowances from or to other program participants. Reducing upwind NO_x emissions will assist downwind PM_{2.5} and 8-hour ozone nonattainment areas in achieving the National Ambient Air Quality Standards (NAAQS).

45CSR39 applies to large fossil fuel-fired electric generating units that have greater than 25 MW_e generating capacity. The CAIR NO_x Ozone Season Trading Program requirements are set forth in 45CSR40.

COMMENT

Standard update of Fed requirements.

CAIR rules

Picking up EPA rules

Are all the cross-outs just picking up federal standards?

Yes.

No other questions.

45CSR40 – Control of Ozone Season Nitrogen Oxides Emissions

SUMMARY

This rule establishes the general provisions and the designated representative, permitting, allowance, monitoring, and opt-in provisions for the state CAIR NO_x Ozone Season Trading Program pursuant to the federal Clean Air Interstate Rule (CAIR) under Section 110 of the Clean Air Act (CAA), 40 CFR Part 96, Subparts AAAA through IIII, and 40 CFR §51.123 for state implementation plans as a means of mitigating interstate transport of ozone and nitrogen oxides (NO_x).

This rule partially fulfills the State’s obligations in response to the United States Environmental Protection Agency’s (U.S. EPA) final rule, *Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NO_x SIP Call* (12 May 2005, at FR 25162). The federal rule requires that large emitters of NO_x reduce ozone season emissions through the constraint of set budgets. U.S. EPA is specifying that ozone season NO_x emission reductions be implemented in two phases. The first phase of ozone season NO_x reductions starts in 2009; the second phase starts in 2015, and continues thereafter. The NO_x emission reduction requirements are based on controls that are known to be highly cost effective for electric generating units and large industrial boilers. Flexibility is built in through market-based “cap and trade” provisions which allow sources to buy or sell NO_x emission allowances from or to other program participants. Reducing upwind ozone season NO_x emissions will assist downwind 8-hour ozone nonattainment areas in achieving the National Ambient Air Quality Standards (NAAQS).

Because CAIR subsumes the ozone season NO_x SIP Call trading program, existing NO_x SIP Call rules 45CSR1 and 45CSR26 and their ozone season NO_x reduction provisions must be “sunsetting” by January 1, 2009. Therefore, 45CSR40 contains a repeal clause which

effectively “sunset” these rules, meeting the approvability requirement for implementing CAIR.

45CSR40 applies to large fossil fuel-fired electric generating units that have greater than 25 MW_e generating capacity and large fossil fuel-fired industrial boilers with a heat input greater than 250 mmBtu/hr. This rule also applies to affected cement kilns and internal combustion engines, by retaining the NO_x SIP Call ozone season NO_x emission reduction requirements for these sources from 45CSR1. These existing requirements do not provide for inclusion in any cap and trade program for cement kilns and internal combustion engines. The CAIR NO_x Annual Trading Program requirements are set forth in 45CSR39.

COMMENT

These changes have they resulted in any change in stringency?

No we are simply streamlining the CAIR rules

We haven’t lost any ground?

No.

45CSR1 – Control of Annual Sulfur Dioxide Emissions

SUMMARY

This rule establishes general provisions and the designated representative, permitting, allowance, monitoring, and opt-in provisions for the state CAIR SO₂ Trading Program pursuant to the federal Clean Air Interstate Rule (CAIR) under Section 110 of the Clean Air Act (CAA), 40 CFR Part 96, Subparts AAA through III, and 40 CFR §51.124 for state implementation plans as a means of mitigating interstate transport of fine particulates and sulfur dioxide (SO₂).

This rule partially fulfills the State’s obligations in response to the United States Environmental Protection Agency’s (U.S. EPA) final rule, *Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NO_x SIP Call* (12 May 2005, at FR 25162). The federal rule requires that large emitters of SO₂ reduce annual emissions based upon the implementation of retirement ratios for SO₂ allowances allocated under the Acid Rain Program. U.S. EPA is specifying that annual SO₂ emission reductions be implemented in two phases. The first phase of SO₂ reductions starts in 2010 and requires retiring SO₂ allowances at a 2:1 ratio; the second phase starts in 2015 and requires retiring SO₂ allowances at a 2.86:1 ratio, and continues thereafter. The SO₂ emissions reductions requirements are based on

controls that are known to be highly cost effective for electric generating units. Flexibility is built in through market-based "cap and trade" provisions which allow sources to buy or sell SO₂ emission allowances from or to other program participants. Reducing upwind SO₂ emissions will assist downwind PM_{2.5} and 8-hour ozone nonattainment areas in achieving the National Ambient Air Quality Standards (NAAQS).

45CSR41 applies to large fossil fuel-fired electric generating units that have greater than 25 MW_e generating capacity.

COMMENT

No questions.

OTHER BUSINESS

Appreciation to Trish White for her work on these rules.

Larry Harris wanted to know about Pocohantas Water Treatment Plant Status? Randy Huffman located Cliff Whyte from DWWM to give him the information.

Trish White will e-mail everyone with next meeting date....

Larry Harris moves we adjourn – Bill Raney seconds.