

IMPORTANT NOTE:

The Department of Environment and Conservation has provided the following document as a means to assist public participation in the triennial review of water quality standards. Development of any regulation, including the General Water Quality Criteria (1200-4-3) and the Stream-use Classifications for Surface Waters (1200-4-4), is governed by the Tennessee Uniform Administrative Procedures Act.

While it is the department's hope that public participation will continue in the development of clean water goals, release of this document should not be taken to represent a reopening of the formal public comment period. Additionally, the rulemaking hearing before the Tennessee Water Quality Control Board is not a public hearing on these rules pursuant to the Uniform Administrative Procedures Act 4-5-201 et. seq. However, the Water Quality Control Board may, at its discretion, allow attendees at the meeting to speak concerning the proposed changes.

The department reserves the right to make revisions to these documents prior to the rulemaking hearing.

Questions about this process can be directed to Greg Denton at (615) 532-0699 or Gregory.denton@state.tn.us

DRAFT

2006 Triennial Review of Water Quality Standards

Summary of Public Comments and Tennessee Water Quality Control Board (WQCB) Responses

(Note: in some instances, public comments have been summarized in order to group similar observations by multiple reviewers.)

A. GENERAL COMMENTS: Public Participation Process

Comment A-1. *The comment period should be extended.*

Response: In response to this comment, we extended the review period an additional two weeks.

Comment A-2. *TDEC's notice procedures are inadequate.*

Response: The formal rulemaking hearing notice was published in the Tennessee Administrative Register on November 15, 2005. Persons on the division's public notice list, maintained for people wishing to receive individual notifications about regulation changes, were sent a notice in the mail about the proposed revisions. (Persons can be added to this mailing list upon request.)

In addition to the administrative notices, special electronic notice was sent to persons who attended one of the 14 public hearings held during the last triennial review. We placed legal notices in local newspapers and posted the notice on our webpage. We believe that we have not only met the letter, but also the spirit of the notification procedures.

Comment A-3. *TDEC's public hearings should be held in the evening.*

Response: Multiple public hearings were held during this triennial review and several were held in the evening. We try to have a mix of evening and daytime hearings to accommodate different schedules. Commenters can also submit written comments if they are unable to attend a hearing in their area.

Comment A-4. *TDEC's public hearings should be centrally located in the targeted area.*

Response: We try to locate hearings in the different areas of the state. We do the best we can to pick convenient locations, but are limited to sites where we do not have to pay for the use of facilities.

Comment A-5. *I would like a direct response from TDEC regarding my comments.*

Response: Given the volume of comments, it is not feasible to respond to each letter and email individually. Additionally, we believe that an important part of the participation process is for the public to be able to read the responses the department prepares for the issues raised by other commenters. We are making this document available on our website.

B. GENERAL COMMENTS: Legal Considerations and Federal Requirements

Comment B-1. *These revisions may put Tennesseans at a competitive disadvantage with other states if our criteria are more stringent than EPA requirements. Tennessee should not promulgate any criteria not specifically required by EPA.*

Response: The foundation of our proposed revisions is the existing national numeric criteria that are adopted by all states, not just Tennessee. It is difficult to respond to the second comment without knowing which criterion the statement is directed at. Every change we have proposed, required or not, was because we felt that it reflected the best science and improved our ability to set or implement clean water goals.

Comment B-2. *For every individual revision, the department should state whether or not the change was required by EPA.*

Response: It is not feasible to provide this information in the detail requested. In general, Tennessee's numeric criteria are based on the national criteria published by EPA. For 304(a) pollutants, we are required to adopt either EPA's national recommendations, or provide a science basis for a different number, a difficult task as Tennessee generally does not undertake primary research into the toxicity or human health effects of substances.

Stream use classifications are assigned by the Water Quality Control Board, although these designations are required to be consistent with Clean Water Act goals (fishable/swimmable waters). Our current antidegradation implementation rule, while based on a framework of federal requirements, is the result of changes to the prior rule made during a series of consensus-building discussions in 2003 between multiple citizen and regulated community representative groups.

Comment B-3. *The proposed changes do not help the department accomplish its legal mandate to identify and restore impaired waters.*

Response: The commenter has not specified a revision in voicing this concern. We consider the changes we have proposed to reflect not only the most current science, but also our years of experience running the regulatory program. Proper setting of standards is a critical tool in our efforts to identify and restore impaired waters as well as to fulfill our other statutory duties.

Comment B-4. *Clean water goals will not do much good if the department does not have enough staff to enforce them.*

Response: Good water quality goals will help at every step of the regulatory process, including any necessary enforcement actions.

Comment B-5. *EPA recommends that the criteria for carcinogens be calculated at a risk level of 10^{-6} , or one cancer death per 1,000,000 persons. Tennessee uses criteria based on a 10^{-5} risk level. This should be changed to the level EPA recommends.*

Response: EPA recommends risk for carcinogens in the range of 10^{-5} to 10^{-6} . Over 25 years ago, after considering the many conservative assumptions included in criteria calculations based on short-term tests with laboratory animals, Tennessee decided to go with 10^{-5} .

Comment B-6. *Tennessee's water quality standards should clearly state that all sources of pollutants are regulated.*

Response: Water quality standards are goals for Tennessee's waters and do not differentiate between various sources. The extent of the department's regulatory authority is established in the Water Quality Control Act and removal of statutory exemptions would require changing the act.

C. GENERAL COMMENTS: Antidegradation Policy (including *de minimis*)

Comment C-1. *The department should not proceed with changes to the antidegradation policy until it can provide maps of all high quality streams and identify permitted dischargers on each.*

Response: A mapping tool for permitted dischargers is already available at the department's interactive GIS-based mapping resource on its homepage. It can be accessed at <http://www.state.tn.us/environment/wpc/>. EPA's web-based resource called "Surf Your Watershed" also has mapping capabilities for discharger locations.

We previously provided a list of the known high quality waters in Tennessee and have set as a goal to develop maps illustrating these streams. However, rulemaking must proceed in order to meet statutory deadlines. We would be happy to assist any member of the public having difficulty locating high quality waters.

Comment C-2. *The antidegradation policy should not be revised in such a way to make it more stringent.*

Response: We have proposed a set of revisions that adds clarification to the procedures staff use to determine which category a stream goes into for purposes of antidegradation implementation. Some of the changes to the characteristics for Exceptional Tennessee Waters increase the number of streams fitting into the category over those that were Tier II in the existing rules, but other changes have the opposite effect. We do not anticipate a significant change overall. Additionally, we have maintained the protection strategy for each category at the existing levels.

Comment C-3. *The antidegradation policy should not be revised in such a way to make it less stringent.*

Response: Same response as C-2.

Comment C-4. *The changes to the antidegradation policy make it more stringent than EPA requires.*

Response: Same response as C-2.

Comment C-5. *The changes to the antidegradation policy make it less stringent than EPA requires.*

Response: The existing (2003) antidegradation provisions were approved by EPA as being consistent with federal requirements. As we are not proposing to change the protection levels, we believe that EPA will approve the other revisions.

Comment C-6. *If the status of a stream under the antidegradation policy is unknown, then the default presumption should be that it is high quality.*

Response: Our current antidegradation implementation procedure is based on the need to accurately characterize the proper category for a stream before considering authorization of an activity. Some of the revisions we have proposed would relieve the administrative burden on the state by simplifying the characteristics of high quality waters.

Comment C-7. *If the status of a stream under the antidegradation policy is unknown, then the default presumption should be that it is not high quality.*

Response: An antidegradation policy with a default presumption that streams are not high quality would invite federal disapproval of Tennessee's implementation procedures. We cannot recommend this course of action.

Comment C-8. *The changes to the antidegradation policy places an unfair burden on the business community in Tennessee.*

Response: The state may not authorize degradation without justifying that the change in water quality is in the public interest. If the commenter has a suggestion on how the administrative burden might be reduced, while maintaining the state's ability to make a proper judgment concerning degradation, we would be happy to consider it. However, the commenter should be aware that the department does not consider the administrative burden to have been changed by the proposed revisions.

Comment C-9. *Why is alternatives analysis required?*

Response: The state cannot determine that degradation is in the public's interest based on social and economic necessity unless an examination of alternatives has occurred. When an applicant submits the analysis, it becomes available for public review and comment during the permitting process.

Comment C-10. *The requirement that an alternatives analysis be done places a burden on the regulated community that represents an unfunded mandate that goes beyond federal requirements. Under state law, the state is required to fund this activity, a fact that should be reflected in the regulation. The regulation should also identify the method that the state will use to distribute monies to the regulated community for this unfunded mandate.*

Response: EPA requires that alternatives analysis be part of an antidegradation review. Therefore, this does not go beyond the federal requirement. We do not believe TCA § 4-5-226(l) is applicable.

Comment C-11. *The department should not proceed with changes to the antidegradation policy until a cost/benefit study has been done.*

Response: The cost and benefits of the alternatives for each individual project will be evaluated as part of the antidegradation process. Where the project is in the economic or other interest of the public, degradation can be authorized, except in ONRWs or impaired waters. See also the response to comment C-2.

Comment C-12. *The antidegradation policy should be used to protect Tennessee's aquatic diversity, plus species with special status.*

Response: We agree. The proposed characteristics for Exceptional Tennessee Waters include measures of biodiversity and the presence of threatened and endangered species.

Comment C-13. *Mitigation should not be mentioned in the regulation as it has not been shown to adequately replace lost resource values.*

Response: A failure of mitigation projects to replace lost resource values in any specific setting is a permitting or enforcement issue, rather than a clean water goal setting issue.

Comment C-14. *The names of the protection levels under the antidegradation policy should not be changed.*

Response: We understand this comment, but feel that the old naming structure based on "tiers" led to a number of chronic misconceptions. The new system, while not perfect, at least goes in the direction of clearing up some of the confusion. We would be happy to consider other category names that would reflect a change from the previous nomenclature.

Comment C-15. *De minimis impacts should not be authorized in ONRWs.*

Response: The protection level for ONRWs requires that new discharges, expansions of existing discharges, or degradation be prohibited. We will add the word “unmeasurable” to 1200-4-3-.06(5) in order to reinforce the idea that only very small water quality changes can be authorized in ONRWs. This change will make it clear that the allowable impact to ONRWs is less than *de minimis*, but more than a molecule or two.

Comment C-16. *Tennessee’s streams and lakes are widely used for recreation. New discharges of domestic wastewater should not be allowed without a full antidegradation review.*

Response: Public health agencies have long advised against recreation near outfalls from domestic wastewater treatment facilities. Some pathogens are known to be resistant to conventional disinfection techniques. We agree with the commenter that new domestic wastewater discharges should receive a full antidegradation review. We will change the definition of *de minimus* so that it does not apply to these discharges.

Comment C-17. *All the department’s general permits should be considered de minimis in effect and subject to no further antidegradation review.*

Response: We agree that activities authorized under general permit can represent *de minimis* levels of impact. Our present policy is that if the general permit was public noticed and reviewed as representing only a *de minimis* level of impact, then an antidegradation review is not required for coverages issued under those permits. However, not all of the department’s general permits have included a *de minimis* determination and undergone public review on that basis.

Comment C-18. *Citizens should be able to suggest protection levels for individual streams, if the department has not already made a determination.*

Response: We would be happy to accept these suggestions, subject to verification.

Comment C-19. *Department staff are not qualified to make social and economic necessity determinations for Exceptional Tennessee Waters.*

Response: For that reason have incorporated EPA’s guidance to how best to make these decisions.

This issue came up when the environmental and industry groups met in 2003 to establish the current consensus implementation procedure for antidegradation. In identifying the department as the first level for this economic and social necessity decision process, the groups expressed confidence in our ability to make these determinations.

Where groups or individuals feel that any specific determination has been made incorrectly or improperly, the appeal or declaratory order processes can be initiated.

Comment C-20. *The burden of proof should be on an applicant to demonstrate that the proposed degradation is in the public interest.*

Response: We agree and consider that to be the plain meaning of the language in the regulation.

Comment C-21. *Location-based requirements for identifying high quality waters are contrary to the Tennessee Water Quality Control Act.*

Response: In the federal regulations, placed-based settings such as parks are specifically mentioned as being likely locations to find high quality waters. Previous iterations of Tennessee's standards also refer to parks as places where high quality water is found, so we do not see the proposed changes to reflect a position change on this. We see nothing in the Act to the contrary.

Comment C-22. *Just because a stream is on public lands does not mean that its water quality is automatically good. The department should evaluate all streams on public lands and not require a full antidegradation review on those that do not have exceptional chemical quality or biological integrity.*

Response: We agree that not all streams on public lands have great chemical quality or biological diversity. However, high quality status is not solely based on the water quality factors the commenter mentions, but rather in large part on scenic values or public recreation. Additionally, it would be contrary to our goal of lessening the department's administrative burden to go back to a system in which chemical and biological data must be collected on every stream in which this determination must be made.

Comment C-23. *In those cases where mineral rights under state lands are owned by others, the Exceptional Tennessee Waters provision might prevent mining.*

Response: The protection level assigned to Exceptional Tennessee Waters does not prohibit degradation if it is in the public's interest that it be authorized.

Comment C-24. *The antidegradation policy might be used to limit activities such as remining, which can actually improve the water quality in an impacted stream.*

Response: Only activities that cause degradation require a full antidegradation review.

Comment C-25. *Placement of a stream on the Exceptional Tennessee Waters list affects the permit limits given to potential dischargers, much as the 303(d) List does. For that reason, any Exceptional Tennessee Waters should be specifically listed in regulation so that the board can promulgate them.*

Response: It is not the list itself that affects permit limits, it is the criteria for being on the list. These are in the rule. This is no different than the way all other water quality standards work. The list of Tennessee Exceptional Waters is provided, in this case, for educational purposes to show how the rule applies to certain waters across the state.

Further, we believe that EPA would disapprove any system that depends on specific listing of high quality waters in order to implement antidegradation provisions in those waters. Such an approach has been attempted without success in other states.

Comment C-26. *The department should identify high quality waters based on a 12-digit hydrologic unit, rather than the segment-by-segment approach currently used.*

Response: For now, the segment-by-segment approach provides the type of site-specific approach needed for considering activities that degrade only one spot, such as habitat alterations. Perhaps we could consider another approach in the future if it were considered a better approach for resource management.

Comment C-27. *"Status quo" discharge renewals should not be required to do alternatives analysis. The regulation should be clear that a simple reissuance that does not represent additional loadings of pollutants is not degradation.*

Response: We believe that it is appropriate permitting procedures to have all reissuances consider whether or not any of the factors controlling alternatives

have changed since their original permit was issued. For example, small dischargers should determine whether sewer service has been extended to their area and consider connecting if it has.

Comment C-28. *The antidegradation policy should be clear that impacts to downstream waters must be considered.*

Response: All activities that have a greater than *de minimis* impact to Exceptional Tennessee Waters must go through the antidegradation review process, whether the activity occurs in the identified segment or upstream.

Comment C-29. *The department's permitting rules should be modified to include additional information concerning alternatives analysis.*

Response: We will consider this change during the next revisions of 1200-4-5.

D. GENERAL COMMENTS: Miscellaneous

Comment D-1. *1200-4-3 in its entirety should be rewritten in such a way to make it more understandable.*

Response: We would be happy to consider specific wording revisions.

Comment D-2. *1200-4-3 should include a map of Tennessee's subecoregions.*

Response: We agree in spirit, but feel that such a map would not be helpful at the scale possible on an 8.5 by 11 piece of paper, the size page required under the rulemaking regulations. To provide this information in a user-friendly format, the department has posted an interactive GIS-based mapping resource on its homepage. It can be accessed at <http://www.state.tn.us/environment/wpc/>.

Comment D-3. *Regulatory programs tend to lag behind the newest science.*

Response: We understand this comment and agree that there can be delays in incorporation of the newest science into state and national criteria documents. However, we note in defense of the present system that many of the delays are designed to allow full public participation into goalsetting, which we see as a good and important activity.

Comment D-4. *Tennessee should continue to make progress in developing numeric lake criteria.*

Response: We agree. Specifically regarding nutrients, the department has developed a written plan for development of nutrient criteria. This document can be accessed from our webpage at <http://www.state.tn.us/environment/wpc/publications/NutrientCriteriaWorkplanRev.pdf>.

However, the commenter should be aware that implementation of this plan is contingent on the availability of resources.

Comment D-5. *Tennessee should standardize the units in the criteria tables.*

Response: The units in the criteria table are consistent with how data are reported from the laboratory. We prefer the tables as they are.

Comment D-6. *The formulas for calculating criteria cannot be understood by the public. Can we not just have a single number that does not have to be calculated?*

Response: The toxicity of certain substances such as metals or ammonia can be substantially altered by environmental conditions such as the pH, temperature, or the hardness of the water. For these substances, development of formulas is necessary to ensure that criteria accurately reflect scientific knowledge about the pollutants.

Comment D-7. *Why didn't the department add flow criteria for designated uses other than fish and aquatic life and recreation.*

Response: Low flows are less likely to interfere with uses other than fish and aquatic life or recreation. Furthermore, all streams are classified for fish and aquatic life and recreational uses.

Comment D-8. *The department needs to specify exactly how it intends to apply narrative criteria such as suspended solids under fish and quality life, or color under recreation.*

Response: We agree that the department needs a process for interpreting narrative criteria, but feel that the regulation is not the appropriate place for such detail. For certain substances or conditions such as habitat, biological integrity, and nutrients, we have developed companion guidance documents that provide

regional numeric translators of narrative criteria. (These documents can be accessed at our webpage.) This would be our preferred approach for color or suspended solids.

Comment D-9. *The regulation should limit the amount of assimilative capacity any one discharger can take up.*

Response: Such a policy, if appropriate for regulations, would be better placed in the permitting rule.

Comment D-10. *The regulation should specifically prohibit the filling of streams.*

Response: Such a prohibition would need to be in the statute. Otherwise, the regulation would be in conflict with the statute.

Comment D-11. *TDEC needs the ability to issue stop work orders in order to implement this regulation.*

Response: Changing the Water Quality Control Act would be necessary for this. (The Attorney General issued Opinion No. 01-105 stating this.) As the commenter may know, the General Assembly recently passed legislation proposed by the Governor giving TDEC stop work order authority over coal mining.

Comment D-12. *The new flow criteria should be deleted because flow is not a “quality” criterion. Removal of flow causes other criteria to be violated, which should be the mechanism for regulating it.*

Response: We do not agree. Certainly, if a stream is being used for boating and a water diversion or withdrawal causes it to go dry, then the recreational use is lost. The lack of water is the impairment, even though other criteria may also be violated.

Flow alteration is caused by activities that the department regulates in many instances. We consider having criteria for flow to be appropriate.

E. SPECIFIC COMMENTS: 1200-4-3-.02, General Considerations

Comment E-1. *In 1200-4-3-.02 (5), why was the word “protective” substituted for “stringent.”*

Response: We think the word “protective” conveys the meaning of the text better than does the word “stringent,” a word often considered to have a negative connotation. Additionally, the word stringent is often taken to mean lower, and in the case of some criteria, a lower number is bad (e.g., streams impacted by low pH).

Comment E-2. *In 1200-4-3-.02 (6), the words “when they become a stream” should be added to the end of the second sentence.*

Response: Because “stream” is not a defined term, we believe the current wording is clearer. One is not “downstream of wet weather conveyances” if still in one.

Comment E-3. *What is the difference between a wet weather conveyance and a ditch?*

Response: We think that most of the time, a ditch is a wet weather conveyance. However, the word “ditch” has no meaning in the regulation.

Comment E-4. *There is some awkward wording in the first sentence of 1200-4-3-.02 (7).*

Response: We agree and will make the following revision: “Where general water quality criteria are applied on a regional, ecoregional, or subcoregional basis, these criteria ...”

Comment E-5. *The commenter dislikes the description of wadable stream given in 1200-4-3-.02 (7). Additionally, it would be better placed in the definition section.*

Response: We like our definition of wadeable streams. A stream might be shallow one day and deep the next, so a depth requirement is not helpful. Under our definition, if the stream can be sampled using a one meter square or smaller kick net when the bottom of the net is in the sediment and the top is at or over the surface level, it is wadable. We agree that the proposed language would be better placed in the definitions section and will make this change.

Comment E-6. *Some streams are too small to be sampled with a one meter square net. This definition suggests that they are not wadeable.*

Response: The commenter is correct and we will make this revision.

Comment E-7. *In 1200-4-3-.02 (9), the paragraph should acknowledge that other appropriate methods may be used.*

Response: It may be that there are other methods for making site-specific criteria adjustments, however, EPA has only recognized the identified methods. As any recalculation or adjustment of toxic criteria must be approved by EPA, it would be misleading to suggest that methods not accepted by them would provide an approach likely to be successful.

Comment E-8. *In 1200-4-3-.02 (9), the paragraph should include the following statement: "The criteria shall be applied using the site-specific methodologies approved by EPA."*

Response: We prefer the paragraph as currently composed. The statement suggested by the commenter might be taken to mean that site-specific studies must be done before criteria can be applied. Additionally, we think it is understood that since EPA's approval is required for site-specific criteria studies, methods approved by EPA must be used.

Comment E-9. *The second sentence of 1200-4-3-.02(9)(a) appears to be an incomplete sentence.*

Response: We agree and will make this change.

Comment E-10. *In the last sentence of 1200-4-3-.02(9)(a), the word "can" should be changed to "shall." The department should accept any site-specific criterion that has been approved by the department and by EPA."*

Response: We agree, provided that nothing has changed in the time between the site-specific study approval and the permit application. We will make this change.

Comment E-11. *1200-4-3-.02(9)(b) should be deleted as it appears to be a commentary.*

Response: Paragraph b relates important information. The results of Water Effect Ratio studies can be incorporated into permits without a rule change. Other site-specific criteria study methods cannot.

**F. SPECIFIC COMMENTS: 1200-4-3-.03(1),
Criteria for Water Uses, Domestic Water Supply**

Comment F-1. *The domestic water supply criteria do not have a single sample maximum criterion for E. coli. Why not?*

Response: In general, the geometric mean of multiple samples is considered a better measure of risk. Of course, in finished (tap) water, the coliform criterion is zero, so disinfection of raw water is necessary before finished water can meet the very stringent MCLs in the rules of the Division of Water Supply.

**G. SPECIFIC COMMENTS: 1200-4-3-.03(3),
Criteria for Water Uses, Fish and Aquatic Life**

Comment G-1. *The dissolved oxygen criterion for subcoregion 73a should not be lowered to a less protective level.*

Response: In our view, criteria must be more than just protective- they must also be appropriate. The small streams and sloughs in this area along the Mississippi River function more as wetlands than streams. The best streams we can find consistently violate the existing dissolved oxygen criteria, for reasons unrelated to pollution.

In our view, these streams naturally have lower DO levels and the forms of aquatic life found in them have adapted to these conditions. We believe a lower criterion would be appropriate. However, as EPA has raised concerns about this revision, we will revise our proposal to reflect the DO criterion EPA previously approved for this region (average DO 5 mg/L, minimum DO level 4.0 mg/L) and will make appropriate use of the natural conditions clause in the regulation when assessing streams in this region.

Comment G-2. *The proposed dissolved oxygen criterion for subcoregion 73a refers to a “diverse biological community.” The department should spell out what it means by this phrase.*

Response: The department is withdrawing the proposed 73a criterion. In general, when we refer to a diverse biological community, we mean one that meets the biological integrity goals under the fish and aquatic life designated use.

Comment G-3. *Tennessee’s dissolved oxygen criterion should be raised to a minimum of 6.0 mg/L in areas not already set at that level or higher.*

Response: The present dissolved oxygen criterion of 5.0 mg/L is appropriately protective according to the literature. Additionally, Tennessee's promulgated criterion is more protective than the statewide level used in almost all our neighboring states (daily average of 5 mg/L, minimum 4.0).

Comment G-4. *In some lakes and reservoirs, pH levels fluctuate more than one unit naturally. Also, some healthy wetlands may violate the water quality criterion for pH.*

Response: The criteria are clear that water quality standards exceedences due to natural conditions are not pollution.

Comment G-5. *The state has not proposed criteria for silt, which is currently the most frequently cited pollutant impacting Tennessee waters.*

Response: The commenter is correct that we have not proposed a numeric criterion for silt under the fish and aquatic life protection provisions. We have found our narrative criterion for habitat to be the best tool for diagnosing stream impairment due to excessive silt.

Comment G-6. *The state has proposed narrative language for suspended solids in 1200-4-3-.03(3)(d) based on a comparison of test streams to reference streams. This is an improper basis and should be deleted.*

Response: The department's longstanding position is that narrative criteria, including those for silt, are most accurate when adjusted to account for regional differences in water quality. The amount of silt that might not cause a problem in a West Tennessee stream might cause a serious problem in the mountains of East Tennessee. We are also comfortable that properly selected reference streams represent an attainable goal. We believe the language as proposed is appropriate.

Comment G-7. *1200-4-3-.03(3)(d) should be clear that reference streams other than those in the division's database may be used for comparison. Methods other than the division's methods should be allowed.*

Response: The proposed language neither stipulates a comparison methodology nor a specific set of reference streams.

Comment G-8. *The temperature criteria in 1200-4-3-.03(3)(e) should include a statement that temperature discharge permits properly issued under Section 316(a) of the Clean Water Act comply with Tennessee’s water quality standards.*

Response: We agree and will add this language.

Comment G-9. *Is the proposed ammonia formula used to calculate instream criteria or permit limits?*

Response: Clean water goals are always directed at waters classified for those specific uses. However, the commenter is correct that permit limits are also derived from the criteria, after consideration of the stream’s assimilative capacity. In certain low flow conditions, dischargers may be required to meet criteria at the end-of-the-pipe.

Comment G-10. *The regulation should contain detailed information about how the ammonia criteria will be applied to dischargers.*

Response: We think that such information, to the extent it is needed, would be better placed in the permitting regulation or in an SOP.

Comment G-11. *The ammonia criteria appear to be based on a constant discharge. What criteria are to be used if intermittent flows or discharges are present?*

Response: As previously stated, the ammonia criterion establishes goals for the quality of streams. Discharge limits are developed to ensure that stream criteria are met and the development of permit requirements considers both the nature of the stream and the characteristics of the discharge.

Comment G-12. *The phrase “more than once every three years on the average” in the first sentence of the ammonia language appears to create a criterion almost impossible to apply as the division would have to wait at least six years to decide if the level had been violated.*

Response: The commenter is correct and we will delete this phrase.

Comment G-13. *The criteria for toxic substances may not be adequately protective for some listed species.*

Response: As stated previously, we are very dependant on EPA for guidance concerning the effects of toxic chemicals on aquatic life.

Comment G-14. *The proposed criterion for iron should not listed in the table for toxic substances. Iron is generally not toxic.*

Response: Iron is toxic to fish and aquatic life, according to EPA's 1976 criteria document (Red Book).

Comment G-15. *The department should consider making the criterion for iron narrative, rather than numeric.*

Response: We have not objection to this approach and will make this revision.

Comment G-16. *The department should not promulgate an iron criterion at this time, but should wait until EPA reconsiders the current recommendation.*

Response: Our field observations have confirmed that iron is a substance impacting a number of streams in Tennessee. For that reason, we will propose a narrative criterion. If the science is reevaluated and EPA publishes a new national criterion, we can update the criterion during a future triennial review.

Comment G-17. *In many areas of Tennessee, iron levels are naturally elevated. The criterion may be violated under natural conditions.*

Response: Tennessee's regulation already contains a provision which states that criteria violations due to natural conditions do not represent the condition of pollution.

Comment G-18. *The regulation should contain numeric criteria for nutrients rather than the current narrative one.*

Response: During the last triennial review, numeric nutrient criteria were strongly considered. In the end, the narrative criterion was considered to best provide the flexibility needed to properly assess streams, establish permit limits, and develop TMDLs.

Comment G-19. *The biological integrity criterion should be modified to add that in addition to physical alterations, removal of water is an activity that cannot impact aquatic communities.*

Response: We consider the removal of water to be a type of physical alteration. The new flow criterion in 1200-4-3-.03(n) makes it clear that flows cannot be altered to the extent that fish and aquatic life criteria are not longer met.

Comment G-20. *The biological integrity criterion should be modified to add additional methods beyond the rapid bioassessment protocols, as the language suggests that the wadeable streams procedure can be used on nonwadeable rivers and lakes.*

Response: We agree and will make this clarification.

Comment G-21. *The biological integrity criterion should be numeric rather than narrative.*

Response: During the last triennial review, the department proposed, then withdrew, a set of numerical criteria in favor of a position based on narrative criteria with regional numeric translators. We feel this approach has worked well.

Comment G-22. *The new flow criterion should be modified to require the maintenance of natural flow regimes and the habitats of the full range of species that might be expected to occur there.*

Response: We believe the simpler language proposed by the department will provide the flexibility needed to protect the important resource values of individual waters, whether or not the flow regime is “natural.”

Comment G-23. *How would the new flow criterion be interpreted in intermittent streams or other streams that go dry from time to time.*

Response: The commenter is correct that many streams go dry from time to time due to natural conditions. When those streams would have enough flow to maintain aquatic life, the criteria would prevent them from being altered to the extent that they would no longer support that aquatic life.

Comment G-24. *The proposed new sentence in the habitat criteria should be deleted as it is a description of types of habitat loss rather than criteria language.*

Response: We believe the proposed language helps the reader understand the types of habitat alteration that are covered by the criterion.

H. SPECIFIC COMMENTS: 1200-4-3-.03(4), Criteria for Water Uses, Recreation

Comment H-1. *Tennessee needs a numeric turbidity criteria.*

Response: Our recreational turbidity criterion in 1200-4-3-.03(4)(d) can be applied numerically in certain circumstances if the test stream can be compared to the reference stream database. These numeric interpretations of the turbidity criterion could be used as the basis for TMDLs, for example.

Comment H-2 *Total suspended solids do not impact recreational uses of streams. This should be deleted as a narrative criterion.*

Response: We do not agree and prefer the criterion as written. It is our view that objectionable levels of suspended solids directly interfere with recreation in streams.

Comment H-3. *Tennessee should do as other states have done, set the numeric turbidity criteria at a specific level over natural background.*

Response: We do not concede that we have proposed a less usable or less protective criterion. The one-size-fits-all approach to statewide criteria for non-toxicants is one that we consider to have significant disadvantages in goal setting.

Comment H-4. *Tennessee's color criterion should be numeric and based on reference conditions. The "no objectionable color" standard is overly broad.*

Response: Although we would prefer a numeric color criterion, we do not have enough color data from reference streams to propose regional goals at this time.

Comment H-5. *In the existing regulation, the E. coli criterion for any Tier 2 water is set at 487. The new proposal would change the characteristics for high quality waters. If some of these waters are no longer Tennessee Exceptional Waters under the revisions, the E. coli criterion would be raised to 941. What is Tennessee's basis for being comfortable with the lowering the criteria in these waters.*

Response: The commenter is correct that under the proposed new characteristics for Tennessee Exceptional Waters, some waters that might have been considered Tier 2 under the previous rule, will no longer be captured, thus changing the E. coli criterion for those streams. It is also true that the changes

will cause other streams, not previously captured as Tier 2 under the old rule, to now be Exceptional Tennessee Waters under the new rule. There will clearly be some exchange of streams between the old and new categories.

The main difference between the old and new characteristics is in the area of biological integrity and presence of listed species. Thus, any changes will be made more on the basis of the fish and aquatic life use, rather than recreational uses. The 941 criterion for streams is clearly within the range EPA considers acceptable for recreational use.

Comment H-6. *EPA has published a new national criterion for mercury. Tennessee should adopt this criterion.*

Response: The commenter is correct that EPA's new mercury criterion recommendation is based on a level of 0.3 parts per million mercury in fish tissue. However, because of the difficulty of implementing a water criterion based on fish tissue, EPA intends to also publish implementation guidance. EPA has told states that they may wait until the implementation guidance is available before adopting the new mercury criterion.

The department prefers this approach so that we do not create a situation where we have a new criterion on the books that we are uncertain how to implement.

Comment H-7. *Tennessee lists 1,1-Dichloroethylene as a carcinogen. EPA does not consider it to be.*

Response: We agree and will make this change.

Comment H-8. *Tennessee does not list 1,3-Dichloropropene as a carcinogen. EPA considers it to be.*

Response: We agree and will make this change.

Comment H-9. *Tennessee lists lindane as a carcinogen. EPA does not consider it to be.*

Response: We agree and will make this change.

Comment H-10. *The chronic criterion for lindane should not be changed from the previous level.*

Response: This is a change suggested by EPA. We are dependant on EPA's recommendation regarding lindane as we have no independent expertise or research on this subject.

Comment H-11. *EPA has dropped the national criterion for each PCB aroclor in favor of the criterion for total PCBs.*

Response: We agree and will make this change.

Comment H-12. *The narrative nutrient criterion in 1200-4-3-.03(4)(h) should be clearer that other types of waterbodies are protected in addition to streams.*

Response: We agree and will change the word "stream" to "waterbodies."

Comment H-13. *Does Tennessee have a legal basis for establishing a nutrient response criterion for their portion of Gunterville Reservoir with a compliance point in Alabama?*

Response: Our efforts on Gunterville were to match Alabama's existing chlorophyll a criterion on this shared waterbody so that the entire reservoir would have the same clean water goal. However, since this legal issue has been raised, we will delete this proposal. Gunterville Reservoir will still be covered under the narrative nutrient criterion in 1200-4-3-.03(4)(h).

Comment H-14. *Tennessee has proposed a nutrient response criterion for Gunterville and Pickwick which is based on average levels over a growing season. There should also be a daily max level set of chlorophyll a.*

Response: Chlorophyll a is not a toxic substance. Elevated biomass in lakes affects recreational use over time. We believe that a criterion based on average levels provides the best way to measure cumulative impacts.

(Note: the division is aware that some bluegreen algae can be toxic to livestock and that the marine algae *Pfiesteria* has created a water contact problem in certain estuary areas. However, there is no evidence that any Tennessee lakes have a problem with those types of algae, especially *Pfiesteria*.)

Comment H-15. *Tennessee's calculations for issuing fishing advisories are based on a default body weight of 75 kg. This is not adequately protective of children.*

Response: Tennessee issues two levels of fishing advisories. The one at the lower threshold, commonly called a precautionary advisory, is specifically designed to protect sensitive sub-populations, such as children.

Regarding non-carcinogens such as mercury, the process for issuing fishing advisories is based on Action Levels published by the U.S. Food and Drug Administration (FDA). Although not specified in the regulation, traditionally the department considered advisories for sensitive groups, such as children, to be appropriate at one half the FDA level. We will add language specifying this practice, but also allowing the department use other national criteria as deemed appropriate.

I. SPECIFIC COMMENTS: 1200-4-3-.04, Definitions

Comment I-1. *The definitions should be in alphabetical order.*

Response: We agree and will make this change.

Comment I-2. *The definition of a mixing zone should be modified so that it requires NPDES permits to clearly identify the mixing zones for each discharger.*

Response: We do not consider these rules to be a proper place to establish permitting requirements. This could be considered in future revisions to the permitting rules.

Comment I-3. *The definition of degradation should be modified so that it reads as follows: “Degradation – The alteration of properties of water by the addition of pollutants or removal of water or alteration of habitat, resulting in a condition of pollution and the lowering of water quality such that the ability to meet current goals is affected.”*

Response: This would be inconsistent with federal requirements. The commenter has suggested changing the definition so that a water quality change is not degradation unless uses are affected. That is the proper definition of the condition of pollution rather than degradation, which is any lowering of water quality, unless *de minimis*.

Comment I-4. *The definition of degradation should not include a statement that says that any addition of chemicals represents degradation. Chemicals added to the water might improve water quality, for example, if lime was added to correct pH.*

Response: Adding lime to a stream would require a permit. During the permitting process, each addition of pollutants is evaluated. Those that do not represent degradation would not have to go through a full antidegradation review.

Comment I-5. *The cap on any individual application of de minimis is 5 percent. This cap should not be set at this level, as a higher use of assimilative capacity might also be de minimis.*

Response: The regulation already has 5 percent established as the upper limit for each individual application of the *de minimis* provision. We have not proposed to raise this threshold and would need a science basis to do so. The commenter has not suggested a basis for this change.

Comment I-6. *The cap on any individual application of de minimis should be set at 20 percent.*

Response: We consider 20 percent too great a loss of assimilative capacity to be considered insignificant.

Comment I-7. *If an alteration only changes the water quality for something covered by a narrative criterion, that alteration should be considered de minimis, as long as uses are maintained.*

Response: The definition of degradation applies to all pollutants, not just the ones that we have numeric criteria for.

Comment I-8. *The definition of degradation contains a provision for de minimus impacts. This is objectionable as no amount of degradation should be allowed in Tennessee's high quality waters.*

Response: The concept of *de minimus* degradation is needed for those occasions in which the amount of additional loading of a substance, the loss of habitat, or a water withdrawal is so small that it is more theoretical, rather than measurable degradation.

Comment I-9. *Any additional degradation above the ten percent cumulative cap should never be considered de minimis.*

Response: While we generally agree, we feel that there might be occasions in which a very small additional amount of degradation above the ten percent cap might be justified as *de minimis*.

Comment I-10. *The need to maintain some flexibility on the cumulative cap on multiple applications of de minimis is reasonable. However, there should be a cap on this to avoid the appearance that this provision could be used to allocate a significant amount of the assimilative capacity of a stream without justification that it is the public's interest.*

Response: The proposed language requires that any additional degradation be "insignificant." We consider this to be sufficiently restrictive.

Comment I-11. *Regarding the provisions dealing with water withdrawals in the definition of de minimis, the 5 percent cap on individual withdrawals should be based on average withdrawal rates. Also, a greater than 5 percent withdrawal should be treated as de minimis if the water is returned.*

Response: We believe that the *de minimis* cap should be based on the maximum withdrawal rates. A 5 percent average might be accomplished by withdrawing considerably more than 5 percent for some period of time, then balancing it with lower rates. Also, the department must make the determination based on what is being authorized, which is the maximum.

Regarding withdrawals that are returned to the stream, we believe that the current definition already gives us the flexibility to consider this. However, we note that in some streams, there may be some distance between a withdrawal point and the return point. In this dewatered section of stream, the effect would have to be considered and might not be *de minimis*.

Comment I-12. *The definition of de minimis should specify that in addition to in-system mitigation, out-of-system mitigation or the purchase of mitigation credits can also represent de minimis conditions.*

Response: The department's position and that of recent court decisions is that out-of-system mitigation or the purchase of mitigation credits do not render an activity *de minimis*. Only in-system mitigation addresses the impacts to the waters where the degradation is being authorized.

Comment I-13. *The inflexible definition of de minimis might prevent the division from authorizing watershed trading.*

Response: We do not agree that watershed trading, where appropriate, would be impeded in any way by the *de minimis* provision. Trading can only be authorized in those situations where the net effect to water quality would be a maintenance or improvement in water quality for a specific pollutant, i.e. also must be in-system.

Comment I-14. *The antidegradation provisions at each level should specifically authorize pollutant trading.*

Response: Trading can already be authorized in those situations where the net effect to water quality would be a maintenance or improvement in water quality for a specific pollutant. Guidance on trading would be better placed in either the permitting guidance or regulations.

Comment I-15. *Who is the decider concerning what is a de minimis level of degradation?*

Response: The department makes a determination regarding *de minimis* at the time a request for authorization for an activity is received. Activities ruled to be *de minimis* do not go through a full antidegradation review. Like any other permitting action, *de minimis* calls can be appealed.

Comment I-16. *The department should specify the length of time that an activity is considered temporary. Six months is suggested.*

Response: We think that the length of time an effect might be considered temporary depends on the activity and the nature of the stream. In some streams, six months might be much too long.

Comment I-17. *The rule should specify that the department's basis for a ruling of de minimis should be available for public review and comment. Additionally, citizens should have the right to appeal such decisions.*

Response: We agree that citizens have these rights, but do not think that the definition of *de minimis* needs to reiterate them, since they are already found in statute.

J. SPECIFIC COMMENTS: 1200-4-3-.05, Interpretation of Criteria

Comment J-1. *Since Tennessee does not recognize mixing zones, 1200-4-3-.05(2) should contain no reference to them.*

Response: The commenter is correct the permits are usually written to require instantaneous mixing. However, the concept of mixing zones is a recognized part of permitting strategy.

Comment J-2. *Since all the conditions listed in 1200-4-3-.05(2) are things that cannot be allowed in mixing zones, shouldn't "or" be used in the last line rather than "and?"*

Response: The commenter is correct and we will make this revision.

Comment J-3. *Biological data collected following rain events or during periods of dryness should be treated as pathogen data are under 1200-4-3-.05(5).*

Response: Part of the logic for the rain event pathogen provision is that people are unlikely to be recreating in streams during storms, thus risk is less. However, elevated rain event pathogen results are still violations of the water quality criterion.

Our biologists are also unlikely to be sampling during storm events. Regarding periods of dryness, our biological standard operating procedure (SOP) requires that sampling be done when streams are flowing. We believe that we already have flexibility to consider natural conditions in interpretation of our biological integrity criterion.

Comment J-4. *In 1200-4-3-.05 (4), do criteria apply to unregulated streams?*

Response: Yes. However, at flows less than the 7-day average, 10-year recurrence low flow interval, criteria may be exceeded until flows are restored, if discharges are occurring at permit limits that have been set based on the higher flow. This 10 year event is a rare occurrence.

Comment J-5. *1200-4-3-.05 (4) should refer to dammed and undammed streams, rather than regulated and unregulated.*

Response: We are aware of at least one stream where the regulation of flow is provided by something other than a dam (pump station). We prefer this passage as written.

Comment J-6. *TDEC has proposed adding the word “generally” in the first sentence of 1200-4-3-.05 (4). This should be deleted.*

Response: The word generally is needed to convey the fact that some narrative fish and aquatic life criteria may properly have a different flow basis than the 7Q10 flow.

Comment J-7. *In 1200-4-3--.05(8), the table is called “Required Detection Levels.” Aren’t these more properly described as quantification levels?*

Response: We agree that a change to the title of this table is needed, but believe that it would more properly be labeled as “Required Method Detection Levels.” We will also add a note that says that approved EPA methods should be used.

Comment J-8. *Some of the general water quality criteria are set lower than the detection levels in 1200-4-3--.05(8). Permittees should not be required to meet permit limits set below detection levels.*

Response: Most permit limits are not set at the criteria level, since limits are based on additional factors such as ambient stream flow. However, where permit limits are below current detection levels, compliance with permit conditions is acknowledged with a result of “not-detected” at the appropriate detection level.

K. SPECIFIC COMMENTS:

1200-4-3-.06, Tennessee Antidegradation Statement

Comment K-1. *In moving things around, Tennessee seems to have lost some of the elements of its previous umbrella statement of purpose for the antidegradation policy.*

Response: We agree and will make this change in 1200-4-3-.06(1).

Comment K-2. *1200-4-3-.06(1) should be changed to say that nonpoint sources exempt from permit requirements must utilize cost-effective and reasonable BMPs.*

Response: This language would imply an authority not given to us by the Tennessee Water Quality Control Act.

Comment K-3. *1200-4-3-.06(1) suggests that the state must make a determination of social and economic need when authorizing degradation in water other than Exceptional Tennessee Waters. This should be clarified to indicate that such a determination is restricted to Exceptional Tennessee Waters.*

Response: The proposed language in 1200-4-3-.06 (1) is accurate. Where water quality exceeds the level needed to maintain uses, the state must make a determination that the change in water quality is in the public interest. The suggested change would likely be disapproved by EPA.

Comment K-4. *1200-4-3-.06(1) should be changed to say that 316(a) thermal discharge permits are consistent with the antidegradation policy.*

Response: The commenter is correct that properly issued thermal discharge permits do not run afoul of the antidegradation policy. We will make this addition.

Comment K-5. *The categories of streams that Tennessee has proposed calling “Unavailable Waters” and “Available Waters” should be combined and called “Water Quality Limited Streams.”*

Response: The change suggested by the commenter would require a change from the parameter-by-parameter approach established in 2003. Additionally, the change proposed by the commenter would dictate a “no degradation” requirement for all these streams, as degradation cannot be allowed in water quality limited streams.

Comment K-6. *For the category of streams that Tennessee has proposed calling “Available Waters,” the regulation should contain a detailed list of factors to be considered by the division prior to authorizing degradation of these waters. (The commenter provided a detailed list of these considerations to be added.)*

Response: We believe that the antidegradation policy should have a detailed implementation procedure, but believe that level of detail is best placed into an SOP document rather than the regulation.

Comment K-7. *The list of potential alternatives for water withdrawals should include stream impoundment.*

Response: The list of potential alternatives in the regulation is designed to provide the applicant some sense of the types of potentially less-degrading options that they should consider during their required alternatives analysis. The applicant would be free to consider other options in addition to the ones provided.

Comment K-8. *The list of potential alternatives for water withdrawals includes pricing structures that encourage water conservation. This is beyond TDEC's authority to influence.*

Response: The nexus to the department's water-based authority is provided by the fact that measures that minimize the amount of withdrawal needed, such as pricing structures, among others, are part of showing the necessity of the activity.

Comment K-9. *The phrase "or other treatment alternatives" should be added to the first sentence in 1200-4-3-.06(3)(a)(1.).*

Response: We agree and will make this revision.

Comment K-10. *Paragraph 1200-4-3-.06(3)(b) contains no mention of intergovernmental coordination. Reference to this important process should be added.*

Response: We agree and will make this addition.

Comment K-11. *The proposed category of Exceptional Tennessee Waters should be called "High Quality Waters" instead.*

Response: The suggested change would reestablish the type confusion we are trying to avoid. Under the federal regulation, our "Available Waters" category is also considered "high quality."

Comment K-12. *The Exceptional Tennessee Waters provisions should only be implemented after the applicant has provided water quality data.*

Response: The proposed characteristics for Exceptional Tennessee Waters are not based on the need to collect significant amounts of water quality data.

Comment K-13. *Can a stream that is “available” for one parameter be “unavailable” for another? Can Exceptional Tennessee Waters be “unavailable” for one or more parameters?*

Response: Yes. Status as an Exceptional Tennessee Water does not preclude the possibility that the stream may be at or below a water quality standard for one or more constituents. The classic example of this is the Ocoee River. It is a nationally important recreational resource, yet it violates water quality standards for several parameters.

Comment K-14. *What is the difference between being “at” or “below” a water quality standard? What is meant by water quality “better than the applicable criterion.”*

Response: A stream with a dissolved oxygen level of 5 mg/L is at the water quality standard. A stream with a DO of 4.9 mg/L is below the standard. A stream that runs at 7.0 mg/L DO is better than the applicable criterion.

Comment K-15. *The 1200-4-3-.06(4)(c), the previous regulation cited “ecologically significant populations” of listed species. This wording is preferable to the proposed language which refers to “documented populations.”*

Response: We believe the proposed language is easier to interpret.

Comment K-16. *How will the length or extent of Exceptional Tennessee Waters be determined?*

Response: Where the status is based on a property line, such as a state or national park, the extent within the park would be the basis of the determination. Where the status is based on listed species or outstanding biological integrity, the extent is more difficult to pinpoint. We will use our knowledge of water quality, land use, and other factors to make these determinations.

Comment K-17. *Streams should not be categorized as high quality unless all water quality standards are being met.*

Response: We believe the antidegradation policy is designed to protect the full range of the high quality aspects of a stream, not just the chemistry of water quality. If we implemented the commenter’s suggestion, Reelfoot Lake, the Ocoee River, and many other waterbodies would cease to be high quality waters. We would not consider this change to be appropriate and could not recommend

it. Further, we do not believe that such a policy would be appropriately approved by EPA.

Comment K-18. *1200-4-3-.06(4)(c) refers to species proposed for listing as threatened or endangered. Only species actually listed should be included.*

Response: We agree and will make the suggested change.

Comment K-19. *There should be a mechanism for removing streams from the list of Exceptional Tennessee Waters if the information upon which the listing is based is found to be incorrect.*

Response: The listing of Exceptional Tennessee Waters is not part of the regulation. Streams can easily be added or removed based on new information.

Comment K-20. *1200-4-3-.06(4)(c) should be revised to make it clear that populations of listed species classified as experimental are not included in this provision. One such experimental population is in the Holston River.*

Response: We agree and will make the suggested change. However, the commenter should note that the Holston River from Forgey Creek to Surgoinsville Creek has already been identified as a high quality stream due to the presence of the spotfin chub.

Comment K-21. *The Tennessee Macroinvertebrate Index score needed to promote a stream to Exceptional Tennessee Stream status is proposed at 40. We believe that 38 should be used instead.*

Response: In looking at our databases of biological data, there were many streams scoring a 38 that we thought were good streams, but not exceptional ones. We feel that 40 is the appropriate level for this category.

Comment K-22. *If the Tennessee Macroinvertebrate Index is going to be used to identify streams with exceptional biological integrity, the index should be promulgated as regulation.*

Response: We do not agree. The index is already identified under the narrative biological integrity criterion as an appropriate interpretation tool.

Comment K-23. *A fish IBI could be added to the characteristics of Exceptional Tennessee Waters.*

Response: It could, but as the agency given the responsibility to make this determination, we are comfortable using benthic macroinvertebrates as the primary basis for documenting biological integrity.

Comment K-24. *Scenic and recreational values are important components of what makes a stream a high quality resource. These aspects are under-represented by the characteristics of Exceptional Tennessee Waters as proposed.*

Response: We agree and will add the following additional characteristic as 1200-4-3-.06(4)(g):

(g). Other waters with outstanding scenic, ecological, or recreational values as determined by the department.

Comment K-25. *If the applicant has done a NEPA review or other environmental assessment, that should satisfy the information-submittal requirements under the antidegradation policy.*

Response: Perhaps, but only if the information submitted by the applicant is sufficient in order for the state to make a determination that degradation is socially or economically necessary. Failure to provide the necessary information could hold up projects, as the state must have a proper basis for making these determinations.

Comment K-26. *The rule should clearly state that the department's evaluation of Exceptional Tennessee Waters can be appealed by citizens.*

Response: The right of citizens to appeal permitting actions is already found in statute.

Comment K-27. *The rule should clearly state that public transportation projects are presumed to be justified on the basis of social or economic necessity.*

Response: We agree that public transportation projects may have already gone through a process to establish that the activity is in the public interest. Because this documentation is so readily available and could easily be submitted, we

could not support a categorical exemption and do not believe that one would be approved as consistent with federal regulations.

Comment K-28. *The phrase “or other treatment alternatives” should be added to the first second sentence in 1200-4-3-.06(4)(j).*

Response: We agree and will make this revision.

Comment K-29. *In 1200-4-3-.06(4)(g), it is not clear who is given the responsibility to perform an alternatives analysis for reissuances of previously authorized discharge permits.*

Response: We agree and will make this paragraph clearer that the applicant must perform the required alternatives analysis.

Comment K-30. *Under the provisions for ONRWs, the statement that new discharges, expansions of existing discharges, or mixing zones can not be authorized, unless “such activity will not cause degradation” should be removed. These activities are prohibited.*

Response: We understand this comment, but believe degradation is the ultimate test of what can be authorized in ONRWs. This language was already approved by EPA is being consistent with their rules. We will add the word “measurable” to the quoted phrase.

Comment K-31. *In the list of Outstanding National Resource Waters, the description should be clarified so that it is clear that only the portion of West Prong Little Pigeon River upstream of Gatlinburg is included.*

Response: We agree with the commenter that the present language may cause the reader to incorrectly think that the section of the river between Gatlinburg and Pigeon Forge is included in the designation. We will make this revision.

**L. SPECIFIC COMMENTS: 1200-4-4, Use Classifications
for Surface Waters**

Comment L-1. *The domestic water supply designation of Sulphur Fork Creek should be revised to reflect the relocation of the wastewater discharge point from the city of Springfield. The designation should be removed at Springfield's current discharge point. The domestic water supply classification can be added to the section of the stream where Springfield used to discharge.*

Response: We can certainly add the domestic water supply classification to the section of Sulphur Fork Creek where Springfield previously discharged. However, EPA has told us that the development of a Use Attainability Analysis (UAA) must be completed and the results approved before the removal of classified uses can take place. As a UAA has not been done on Sulphur Fork Creek, we cannot go forward with this revision without provoking an EPA disapproval action.

Comment L-2. *Hurricane Creek, a tributary to the Tennessee River in Stewart County, is a trout stream and should be changed in 1200-4-4-.04.*

Response: We agree and will make this revision.

Comment L-3. *Barrett Branch and Service Branch, two tributaries to the Bald River, are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-4. *McNabb Creek, Laurel Branch, and Service Tree Branch, three tributaries to the North River, are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-5. *Panther Branch, a tributary to the Tellico River, is a naturally reproducing trout stream and should be changed in 1200-4-4-.08.*

Response: We agree and will make this revision.

Comment L-6. *Crowder Branch, Mill Branch, and Flint Branch, three tributaries to Double Camp Creek, are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-7. *Indian Valley Branch, a tributary to North Fork Citico Creek, is a naturally reproducing trout stream and should be changed in 1200-4-4-.08.*

Response: We agree and will make this revision.

Comment L-8. *Panther Creek, Mill Creek and Rowans Branch, three tributaries to the Abrahms Creek, are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-9. *Rabbit Creek and its two tributaries, Hannah Branch and Peckerwood Branch, are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-10. *Bower Creek and Ekanneetlee Branch, two tributaries to Forge Creek, are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-11. *Shop Creek and Tabcat Creek, two tributaries to the Little Tennessee River, are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-12. *Bible Creek, a tributary to Parson Branch, is a naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make this revision.

Comment L-13. *All the tributaries to the Little River within the Great Smoky Mountains National Park are naturally reproducing trout streams and should be changed in 1200-4-4-.08.*

Response: We agree and will make these revisions.

Comment L-14. *Coal Creek, a tributary to the Clinch River, is a trout stream and should be changed in 1200-4-4-.09.*

Response: We agree and will make this revision.

Comment L-15. *All the tributaries to the West Prong Little Pigeon River within the Great Smoky Mountains National Park are naturally reproducing trout streams and should be changed in 1200-4-4-.09.*

Response: We agree and will make these revisions.

Comment L-16. *Dunn Creek within the Great Smoky Mountains National Park is a naturally reproducing trout stream and should be changed in 1200-4-4-.09.*

Response: We agree and will make this revision.

Comment L-17. *All the tributaries to the Little Pigeon River within the Great Smoky Mountains National Park are naturally reproducing trout streams and should be changed in 1200-4-4-.09.*

Response: We agree and will make these revisions.

Comment L-18. *All the tributaries to South Indian Creek within the Cherokee National Forest above Erwin are naturally reproducing trout streams (1200-4-4-.10).*

Response: We agree and will make these revisions.

Comment L-19. *The lower section of Sinking Creek, a tributary to the Pigeon River is a naturally reproducing trout stream and should be changed in 1200-4-4-.10.*

Response: We agree and will make this revision.

Comment L-20. *Indian Camp Creek, a tributary to Cosby Creek is a naturally reproducing trout stream and should be changed in 1200-4-4-.10.*

Response: We agree and will make this revision.

Comment L-21. *Bailey Branch, a tributary to Dry Fork Creek, is a trout stream and should be changed in 1200-4-4-.10.*

Response: We agree and will make this revision.

Comment L-22. *Bear Branch, a tributary to Gulf Fork Big Creek, is a trout stream and should be changed in 1200-4-4-.10.*

Response: We agree and will make this revision.

Comment L-23. *Moss Camp Creek and Deep Gap Creek, tributaries to Gulf Fork Big Creek, are naturally reproducing trout streams and should be changed in 1200-4-4-.10.*

Response: We agree and will make these revisions.

Comment L-24. *The Watauga River from mile 25.8 to the North Carolina state line is a naturally reproducing trout stream and should be changed in 1200-4-4-.11.*

Response: We agree and will make this revision.

Comment L-25. *Simerly Creek, Shell Creek, Cove Creek, and Buck Creek, tributaries to the Doe River, are naturally reproducing trout streams and should be changed in 1200-4-4-.11.*

Response: We agree and will make these revisions.

Comment L-26. *Mill Creek, a tributary to Roan Creek, is a naturally reproducing trout stream and should be changed in 1200-4-4-.11.*

Response: We agree and will make this revision.

Comment L-27. *Big Dry Run Creek, a tributary to Watauga River, is a naturally reproducing trout stream and should be changed in 1200-4-4-.11.*

Response: We agree and will make this revision.

Comment L-28. *Big Creek and Sulphur Springs Branch, tributaries to South Fork Holston River, are naturally reproducing trout streams and should be changed in 1200-4-4-.11.*

Response: We agree and will make these revisions.

Comment L-29. *Stillhouse Branch, Parks Branch, and Johnson Branch, tributaries to Beaverdam Creek, are naturally reproducing trout streams and should be changed in 1200-4-4-.11.*

Response: We agree and will make these revisions.

Comment L-30. *Dry Branch, a tributary to Gentry Creek, is a naturally reproducing trout stream and should be changed in 1200-4-4-.11.*

Response: We agree and will make this revision.

Comment L-31. *Smith Fork Creek, a tributary to Caney Fork River, is a trout stream from its mouth to mile 3.0. This should be changed in 1200-4-4-.13.*

Response: We agree and will make this revision.

Comment L-32. *Barren Fork River, a tributary to Collins River, is a trout stream from mile 4.5 to its origin. This should be changed in 1200-4-4-.13.*

Response: We agree and will make this revision.

Comment L-33. *Wolf River, a tributary to the Obey River, is a trout stream from the Fentress County Line to its origin. This should be changed in 1200-4-4-.13.*

Response: We agree and will make this revision.