



Citizens Advisory Council

to the Department of Environmental Protection

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Please Note: Our New Fax Number is 717-772-5748

February 11, 1999

Mr. Edward R. Brezina, Chief
Division of Water Quality Assessment and Standards
Bureau of Watershed Conservation
P.O. Box 8555
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400 Market Street
Harrisburg, PA 17105-8555

Dear Mr. Brezina:

At its January 11, 1999 meeting, the Citizens Advisory Council was briefed on the Draft Advance Notice of Final Rulemaking (ANFR) on Water Quality Standards – Antidegradation (25 PS. Code, Chapters 92, 93, and 95). Attached are comments on this package, which were approved by the Council at its February 8, 1999 meeting.

Overall, the Council supports the package as presented. The goal of the program is now to protect all of the waters of the Commonwealth from degradation, not just certain waters. The Advance Notice of Final Rulemaking is an improvement over both the existing program and the proposed regulation.

In particular, we are pleased with the stronger public participation provisions and protection of existing uses. Public notification is critical, and we support notification of all municipalities containing waters subject to an evaluation or assessment. However, Council opposes the suggestion that petitioners be required to provide a full list of landowners in the watershed as both unreasonable and unworkable. We offer to work with DEP to identify more workable and effective notification options for consideration. We also support the language in §93.4c, which is now consistent with federal requirements, and clarifies that the intent of the program is to protect existing uses, as required by federal law.

We are concerned about the lack of clarity provided on some of the issues. For example, the regulation postpones the details of Social and Economic Justification until the Implementation Handbook is revised. It also does not define how DEP plans to “assure that cost-effective and reasonable best management practices for nonpoint source control shall be achieved.” The Council is highly dissatisfied that the handbook is not available for public review concurrent with public review of the regulation. The issues to be addressed in the handbook are critical to the program, and both deserve and require equal



attention. The handbook must be a priority, to ensure effective implementation of the program, and we recommend that a draft of the revised handbook be made available for comment before the rulemaking goes to the Environmental Quality Board for consideration in May.

The enclosed comments expand on these items, raise some questions, and make several recommendations. Council's discussions at both the committee and full Council levels reflect the controversial nature of several of these provisions. On some issues, the vote was not unanimous, but a majority of the members present supported the comments relayed here.

Thank you for the opportunity to comment on this important regulation. Please call Sue Wilson, Council's Executive Director, should you have any questions.

Sincerely,


Jolene E. Chinchilli
Chairperson

Enclosure

The Department asked for comment on two specific aspects of the Commonwealth's antidegradation program as outlined in the Advance Notice of Final Rulemaking:

1. *The Department requests comment on the appropriate chemicals that qualify a water for HQ protection under §93.4b(a) of the draft final regulations.*

Council as a whole does not have the expertise to comment on the specific chemicals that should be used to qualify a water for special protection. However, we request that the Department provide the rationale supporting the eight (8) parameters which have been included in the ANFR. We also ask for an explanation of how the Department reconciles the 8 listed parameters with Tables 4 and 5, which are Statewide Specific Criteria which apply to the surface waters of the Commonwealth and Specific Water Quality Criteria Based on Water Uses to be Protected, respectively, and with Chapter 16, Water Quality Toxics Management Strategy.

Recognizing the resource needs and associated cost to collect and analyze samples for a large number of parameters over a long term, we support minimizing the number of parameters that must be collected to a reasonable amount. The need for adequate information must be balanced against the cost of obtaining that information. We further support retaining the flexibility to consider additional chemical and toxicity information that characterizes water quality on a case by case basis. For example, aluminum is a known problem in many streams in the Commonwealth. We must recognize that we are a long way from fully understanding chemical synergies, long term accumulation and cumulative impacts in the natural environment; at times information on additional parameters will be needed, but should not necessarily be required in all cases.

2. *The Department seeks comment as to whether persons petitioning the EQB to change the designated use of a water to HQ or EV should be required to provide, as part of the petition, a list of landowners (and their addresses) in the watershed sought to be upgraded, from tax maps or other sources, for the purpose of notifying such landowners, or whether there are other methods of notification which are acceptable.*

We agree that public notification is critical and support notification of all municipalities containing waters subject to the evaluation, as required in §93.4a(a) of the regulation. However, the proposal that petitioners be required to provide a full list of landowners in the watershed is both unreasonable and unworkable, for a number of reasons:

- In its comments on the proposed regulation, the IRRRC said that such a requirement would be too burdensome for the agency. If a government agency with a budget of nearly \$600 million and a complement of more than 3,000 cannot meet such a requirement, how can it be feasible much less reasonable to ask an individual or a small non-profit to do so?

- How will “landowner” be defined? Ownership of surface rights only, or will it also include mineral and timber rights? Many areas will have a confusing mosaic of ownership patterns.
- If we need to individually notify surrounding landowners that might be affected, shouldn't we also notify landowners that are downstream beneficiaries of the additional protection? What about others who routinely use the stream?
- The list may change between the time the petition is submitted and when it is actually accepted.

Instead of notifying each individual landowner (however landowner is defined), we need to identify other, more effective but less burdensome, mechanisms for public notification. Possibilities include radio announcements, public service announcements, local cable ad channels, etc. Council offers to work with DEP to identify more workable and effective notification options for consideration.

The following are comments on other aspects of the Advance Notice of Final Rulemaking:

Definitions

The definition of “Outstanding National, State, Regional or Local Resource Water” supports state and local efforts to address issues on a watershed basis, and endorses what some local governments and watershed groups are already doing. Local and regional governments can choose to protect a corridor through land use controls, and state and federal government can protect water resources through resource management plans. There is some question about what “coordinated efforts” by local or regional governments means—how many have to be involved? What if some are not? Clarification is needed.

The regulation as published includes a new term “coordinated water quality protective measures--legally binding sound land use measures which maximize water quality protection in a multi-jurisdictional watershed corridor area, as approved by the EQB as an exceptional value designated use based on the expected environmental benefits in the watershed.” This definition appears to be intended to address some of the questions raised in the paragraph above, but is unclear. The language and use of this term need to be clarified.

It is our understanding that the two categories included in the definition of “Surface Water of Exceptional Ecological Significance” (EV wetlands and thermal springs) are examples of types of waters that might be included, but are not the only types that could be included. These two categories should be clearly listed as examples; the current construction of this definition appears to limit this term to these two categories.

Chemical and Biological Testing

Council supports the change from the requirement in the proposed regulation that a water meet both chemical and biological conditions to requiring it to meet either chemical or biological conditions. Requiring extensive chemical and biological data is potentially burdensome; we should be able to definitively determine water quality by appropriate use of one or the other.

For chemistry to be a decision making tool, it needs to be long enough term to reflect the ongoing water quality; biology already reflects long term changes, so can probably take less time, if done correctly. In some cases, chemical tests might provide an earlier indication of problems than waiting until the biota has been affected. Because we don't know all we need to about chemical synergies and long term accumulations, most members were not comfortable with moving to strictly biological parameters at this time.

The Rapid Bioassessment Protocol referenced in §93.4b(a)(2)(i)(A) appears to be out of date, and has been replaced by a revision (EPA 841-D-97-002). We support the use of biological testing as a means of determining water quality but recommend that the Department ensure that the intended protocol is properly referenced in the regulation.

Existing Use Protection

We support the change in language (§93.4c) supporting existing use protection. This language is consistent with federal requirements, and clarifies that the intent of the program is to protect existing uses, as required by federal law.

Social and Economic Justification

Section 93.4c(b)(1)(i)(A) requires evaluation of non-discharge alternatives in HQ and EV watersheds; the alternative used must be "environmentally sound and cost effective" compared with the cost of the proposed discharge. Clarification of what is meant by "environmentally sound" and "cost effective" as well as of the parameters of the evaluation is needed. In addition, what are the parameters of the demonstration called for in the following paragraph? Do we have benchmarks to check the "demonstration" that there are no environmentally sound and cost effective non-discharge alternatives?

The Department has stated that these are to be clarified and defined in a revision of the implementation handbook. The Council is highly dissatisfied that the handbook is not available for public review concurrent with public review of the regulation. The issues to be addressed in the handbook are critical to the program, and both deserve and require equal attention. The handbook must be a priority, to ensure effective implementation of the program. We recommend that a draft of the revised handbook be made available for comment before the ANFR goes to the Environmental Quality Board for consideration in May. We also recommend that the handbook be cited in the regulation in the appropriate places.

Section 93.4c(b)(1)(ii)(B) requires the applicant for a proposed discharge to HQ or EV waters to collect and respond to public comments after notification through the newspaper. To eliminate any possibility or perception that a permit applicant might withhold pertinent information, we recommend that comments be sent directly to DEP as well to ensure that they are considered.

Section 93.4c(c)(2) mentions "existing public health or pollution hazards"; what constitutes a hazard? Is this definition risk based? This section further states that a sewage facility designed for the purpose of correcting an existing "hazard" documented by the Department satisfies the SEJ requirements for discharging into a HQ or EV stream. It is not clear if this refers only to the capacity required to address the hazard and any additional capacity must still be subject to SEJ, or if it includes what might be considered as excess capacity, that will encourage further development and therefore further stresses on the watershed. It is Council's position that the portion of the facility correcting a documented hazard should satisfy SEJ; however, any portion of the facility that goes beyond addressing that hazard should be required to independently demonstrate SEJ.

Section 93.4d(a) requires that DEP's public notice of receipt of a complete evaluation (should line 5 read "petition" rather than "evaluation"?) for redesignation as HQ or EV request "submission of information concerning the water quality of the waters subject to the evaluation." It is Council's position that the designation should be based on technical and scientific water quality information. The only times that other, more subjective types of information may come into play are when a water is being considered for EV status (already HQ, but with some additional qualifications) or during the SEJ process (when we are trying to balance environmental harm against social and economic factors). This section should be clarified to distinguish between the scientific/technical information required to evaluate water quality, and the economic and social information that may be required to evaluate SEJ for a potential discharge or elevation to EV.

Non-Point Sources

Section 93.4c(b)(2) requires DEP to "assure that cost-effective and reasonable best management practices for nonpoint source control shall be achieved." This section follows the federal language, but is ambiguous and does not indicate how the Department can or will assure such actions, or what will happen if such actions are not implemented. How are "cost-effective" and "reasonable" defined?

Public Participation Requirements

Council supports the improved public participation outlined in the ANFR. In particular, we support the combined public meeting and fact finding hearing as a mechanism to educate concerned citizens, allow for a dialog/give and take on issues related to a stream evaluation, and still provide for formal comment and submission of pertinent information. This approach will improve the quality and usability of comments received.

The public participation requirements for a proposed discharge to a HQ or EV stream are still unclear—§93.4d deals with proposed changes to designated use, but not with proposed discharges. Section 92.61 deals with the public participation requirements for any NPDES permit application, and states that a public hearing will be held if requested. However, a public meeting and/or hearing should be required in the case of a proposed discharge to a HQ or EV stream.

Miscellaneous

Section 95.1 references 33USCA, which refers to the Clean Water Act. We suggest that the title be included as a parenthetical, to make it easier for citizens to read.

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**SUMMARY OF COMMENTS and RESPONSES FOR
DEP's ADVANCE NOTICE OF FINAL RULEMAKING OF
PROPOSED AMENDMENTS TO 25 PA. CODE CHAPTERS 92, 93 AND 95
PENNSYLVANIA WATER QUALITY PROTECTION and
MANAGEMENT STANDARDS
RELATING TO ANTIDegradation**

The Department received numerous comments and written testimony from nearly 800 commenters during the ANFR public comment period. The public comment period included three (3) public hearings/meetings, which were held in the Harrisburg, Conshohocken, and Pittsburgh Regional Offices. Many of the commentors agree that the current draft final regulations are a vast improvement over the March 22, 1997, rulemaking proposal. The commenters commended the Department on its effort. Some believe there are still deficiencies in the current proposal. The Department has attempted to address these concerns in preparing the final rule. The comments and the Department's responses are summarized below.

GENERAL COMMENTS:

Some commenters suggested that the rush to finalize the antidegradation regulation is not warranted, since U.S. EPA is currently in the process of revising the federal program.

Other commenters said there are a number of aspects of the proposed program that they are uncomfortable with, but are willing to support the Department's proposal at this time. They requested that during the next Triennial Review the Department provide a report for public review and comment providing specific case examples of how the final program is implemented.

Response: EPA is not at a stage in revising its Federal Water Quality Standards regulations, which merits Pennsylvania delaying its efforts to improve its antidegradation program. EPA published an Advanced Notice of Proposed Rulemaking in the Federal Register on July 7, 1998, seeking public comments on whether the Federal Water Quality Standards regulations should be revised. The public comment period closed January 4, 1999. The Agency has said that no final decision has been made or is forthcoming. Assuming EPA decides to move forward with proposed rulemaking, it may take several years to complete the regulatory process. Consequently, the Department does not believe it would be appropriate to wait until EPA finalizes its rulemaking.

The Department is not opposed to providing case specific examples of how the program is working, if appropriate, in the next Technical Review.

LANDOWNER NOTIFICATION & PUBLIC PARTICIPATION:

Commenters associated with real estate, construction, development and/or the building trades said DEP should be required to notify, by mail, all landowners, permit holders and applicants whenever a High Quality (HQ) or Exceptional Value (EV) stream assessment is initiated. They

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indicated this notification must include an explanation of the impacts a HQ or EV stream designation will have on the use of their property or permit. Additionally, other commenters associated with farming and/or the agricultural trades requested that every landowner in a watershed be contacted when a HQ or EV stream petition is submitted. They also requested combined public hearings/meetings on petitions and stream redesignations, claiming that landowners should be given a chance (the right) to respond to the petitions and redesignations. The commenters indicated that property owners should be informed of the proposed changes that could affect their property rights. It is claimed that the Department's current practice of notifying local municipal officials does not ensure that all affected parties will be adequately informed.

However, other commenters suggested that petitioners for stream upgrades should not be required to notify all watershed landowners, or be requested to provide a list of all possibly affected landowners. Instead, they suggested that the provision in the ANFR requiring notices in the Pa. Bulletin and/or local newspapers is adequate. One commentator suggested that a requirement to list landowners asserts a presumption that landowners own the water resources, and have a private property right to degrade that resource if they wish, and oppose any antidegradation effort. Another commentator argued that if EQB requires citizens (petitioners) to notify landowners then applicants for NPDES permits and those planning activities that could result in increased (point) and non-point source pollution should be required to undertake similar notification procedures, so that citizens could make timely comment on activities that will degrade public resources.

The Citizens Advisory Council to the Department (CAC) emphasized that public notification is critical, and they continue to support notification of all municipalities. They commented that the Independent Regulatory Review Commission (IRRC) had commented during the proposed rulemaking comment period that landowner notification would be too burdensome for the agency (DEP). Therefore, CAC concluded that it would be unreasonable to expect petitioners, who are often individuals or small groups or non-profit organizations, to meet such a requirement, because the petitioners will have far fewer staff and a much smaller budget to meet the demands.

CAC and several other commenters also questioned how land-ownership would be defined. Many areas may have a confusing mosaic of ownership patterns when one considers the simple surface rights in combination with other mineral and/or timber rights. They also are concerned that the list may change during the petition and rulemaking period.

CAC has offered to work with DEP to identify more workable and effective notification options. They suggest possibilities such as radio and public service announcements, and local cable ad channels, in addition to the current Pa. Bulletin and local newspaper approach being used by the EQB and DEP.

Many commenters support stronger public participation. In particular, they support a combined public meeting and fact-finding hearing approach as a means to educate concerned citizens and allow for an exchange of concerns and ideas related to stream evaluations and designations, while still providing a formal setting to accept formal comments and pertinent information.

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Some commenters said that a public comment period during DEP's review of a permit application is already required, so a requirement that an applicant also request public comments before submitting its discharge permit application is excessive, redundant, costly, and time consuming without any real benefit.

Some commenters recommended that the proposed requirement included in the March 1997 proposal for a public hearing on any proposed discharge (activity) to an EV water be restored.

Response: The Department requested comments as to whether persons petitioning the Environmental Quality Board (EQB) to change the designated use of a water to HQ or EV should be required to provide a list of landowners and addresses for the purpose of notifying such landowners. DEP also inquired whether there were other methods of notification that would be acceptable. Although the Department believes that public notification is critical, having petitioners or the Department try to search and send individual certified letters to each landowner in a watershed is onerous and burdensome and still may not reach everyone. The Department believes more workable and effective notification options include placing notices in local newspapers within the watershed, public service announcements on local radio or television, and working with municipalities to assist in the notification of the potentially affected local citizens, including landowners.

The Department has greatly expanded the public participation requirements in the ANFR. §93.4d(a) requires the Department to publish notices of intent to assess a water for potential HQ or EV designation in both the Pennsylvania Bulletin and local newspapers. In addition, a notice is also required when a completed evaluation is accepted by the EQB. The Department will also notify all municipalities in the affected watershed. These notices will request submittal of additional technical information for use by the Department. §93.4d(b) further provides for combined public meeting and fact-finding hearings to discuss the assessment or evaluation and solicit additional data.

The Department has reconsidered language in the Advanced Notice of Final Rulemaking that requires an applicant applying for a new, additional, or increased discharge to HQ or EV waters to provide proof of publication of a notice in a local newspaper and seek comment for 30-days on the proposal. The Department agrees that these requirements are not necessary since a public comment period is already required as part of the NPDES permit application. These requirements are deleted in the Final Rule.

The Department has added language, in response to the comment, which provides that a public hearing will be held on a proposed discharge to EV waters, when requested by an interested person. This language replaces §95.1(c) which requires mandatory public hearings for all discharges to EV waters, regardless of public interest; numerous hearings have been scheduled and held with the expense of Department staff time and court reporters, and no testimony given.

The Department intends to hold public hearings/meetings when the Department and/or EQB determines there is sufficient interest for a hearing/meeting to address concerns or gather

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additional factual information pertaining to proposed Special Protection designations. The final regulation has been revised to allow for such public hearings/meetings.

SOCIAL OR ECONOMIC JUSTIFICATION:

IRRC commented that social or economic justification (SEJ) for discharges into HQ streams is problematic because the regulation does not contain guidance on: 1) the criteria or factors that will be used to identify and quantify social or economic benefits; or 2) the method that will be used to determine if benefits outweigh the decrease in water quality.

Some commenters questioned the "existing public health or pollution hazards" provision in §93.4(c)(2). What constitutes a hazard? Should it only apply to sewage, or should it apply to other documented hazards from other types of activities? Also, it is not clear whether the satisfaction of the SEJ requirements only applies to the capacity required to address the hazard, or if it includes what might be considered excess capacity. It was suggested that only the portion of a facility designed to correct a hazard should be considered justified. Any portion of a facility or improvements that goes beyond addressing the hazard should be required to submit to an independent SEJ demonstration.

Some comments said the "balancing test" is not required by and is, therefore, more stringent than federal regulations. The SEJ language should be similar to the federal requirements for public participation and intergovernmental review. While some commenters would like the SEJ evaluation to determine the economic or social benefits to the local public, others questioned how this determination would indicate who would be affected by the diminished water quality. Others comments said the SEJ test for HQ streams should not be limited to just discharges to HQ streams. They suggested that SEJ should be required for any activity where a DEP permit or approval that would affect HQ waters is required.

Some commenters suggested the "concept of economic or social benefits to the public" needs to be clarified, and that the public should be defined as the majority of or the legal representatives of a municipality, school district, water district or population in a local geographic area.

Other commenters said the regulation contains vague and subjective language in §93.4(c)(b)(i)(a) concerning non-discharge alternatives into HQ or EV waters. There needs to be guidance for determining what is "cost effective and environmentally sound". There should an indication who will make this determination, and how.

One commenter stated that the SEJ provisions for *de minimus* discharges should be reinstated.

Response: The factors that are considered in determining social and economic impacts are normally case or activity specific. They can include, but are not limited to: the impact on employment or commercial or industrial activity, tax revenues, user charges for public facilities, public health and safety, consistency with local land use plans and zoning ordinances, and compatibility with surrounding land uses. The method for balancing these impacts against potential water quality degradation is also case specific. In general, projects and activities that

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will significantly impact water quality must have greater social or economic benefit than do projects and activities that will have minimal water quality impact. Because of the project and activity specific nature of the application of SEJ, DEP does not believe that the details of the procedure are more appropriately addressed in implementation guidance.

An existing public health or pollution hazard is a situation where there is documented evidence that existing wastewater disposal and pollution control measures either don't currently exist or are no longer functioning in a satisfactory manner, thereby creating a public health or pollution threat. The most common type of hazard usually encountered by the Department in HQ watersheds is failing on-lot sewage disposal systems.

The Department believes that the provisions of Section 93.4c(c)(2) should be restricted to sewage facilities, because in these cases the only practicable method of resolving the public health and pollution hazard may be the construction of centralized sewage disposal plant. Moreover, sewage facilities planning is a public process with extensive local and public involvement. There is no such process for the siting of industrial discharges.

In response to comment, the Department has removed the proposed language specifying that economic or social development "outweigh any reduction in water quality which the new, additional or increased discharge is expected to cause. The Department now uses the language from EPA's antidegradation regulation.

DEP believes that the public includes any interested or affected party or person, and therefore does not believe that the definition of public should be limited in the manner suggested above. This will be clarified in implementation guidance.

The 25% de minimis test has been removed because it has proved to be very confusing and of questionable utility.

CHEMICAL AND BIOLOGICAL METHODOLOGY:

The commenters said DEP should be required to conduct valid and thorough scientific testing and analysis to classify streams, and that chemistry and biology should be considered together. Many claimed that the draft regulations make it far too easy for a stream to acquire an HQ or EV stream designation, and that limited biological sampling will not accurately reflect the stream's quality. Most commenters accept that there is merit in the concept of objective scoring criteria. However, some believe an ill-conceived methodology will have unintended consequences. Therefore, some commenters suggested that before a methodology is adopted there needs to be a thorough peer review of the method. Other commenters agree the biology of a stream reflects long term conditions, but that in some cases, chemical testing might provide an earlier indication of water quality problems that are not yet expressed by the biota. Therefore, the Department should not abandon chemical evaluations. Other commenters endorsed the approach of allowing a stream designation to be determined based on either chemical or biological assessment.

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It was suggested that the list of chemical parameters that qualify a water for HQ protection be expanded to include temperature and all metals for which criteria exist. At the same time, since nitrite plus nitrate nitrogen and manganese are not listed in Chapter 93 to support recreation or aquatic life uses, these parameters should be deleted. Also, "long term" should be defined to include data over a period of at least one year, to which the 99% test would be applied. Other commenters recognized the resource needs and associated cost to collect and analyze a large number of chemical parameters over a long term, and supported minimizing the number of parameters to be collected and analyzed. They agreed that the need for adequate information must be balanced against the cost of obtaining such information. They supported retaining the flexibility to consider additional chemical and toxicity information that characterizes water quality on a case-by-case basis. IRRC and other commenters questioned the basis for decreasing the number of parameters for the chemistry test, and how the selected parameters provide an accurate representation of a stream's water quality.

IRRC indicated that the draft final regulation still contains broad, discretionary language. Sections 93.4b(a)(1) and 93.4b(a)(2)(C) allow DEP to consider additional chemical or biological information in the designation of HQ streams. The regulation should require DEP to provide written notice specifying the additional chemical or biological information needed, and explain why the information is necessary.

Some commenters said the Rapid Bioassessment Protocol referenced in §93.4b(a)(2)(i)(A) is out of date. Other commenters indicated that DEP is not applying all facets of the RBP, which should include fish and periphyton metrics, along with macroinvertebrates. They also suggested that DEP should be more explicit in describing other possible evaluation methods, and not be solely dependent on the RBP method.

Some commenters indicated they do not have sufficient data to assess whether the 83% threshold for HQ or 92% for EV is an appropriate number. Some suggested that if a water is not impaired that it should qualify for an HQ designation. Many suggested that these threshold values should be removed from the regulation and placed in the guidance in the revised Special Protection Waters Implementation Handbook. They asserted that the biological qualifying tests should be quantified in policy or guidance, rather than in the regulations. Since the suggested 83% figure is untested, DEP should try it for three years. Then DEP should issue a report, and if successful, then propose changes for the next available Triennial Review.

Some commenters feel the biological test in §93.4b(a)(2)(i)(A) is limited to a comparison to "a reference stream or watershed". It was suggested that the ideal comparison should be to a reference dataset that contains data from a variety of reference streams. Other commenters said the proposed scoring for water purity and biological quality is open to biased and arbitrary selection criteria. One commenter provided an example using a recent evaluation where the geological structures in the candidate and reference streams were significantly different. Reference streams should closely match candidate streams in terms of geology and other ecological parameters. Some commenters said the final regulation should specify the Department's selection criteria for choosing a reference stream.

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Some commenters said classification of the Pennsylvania Fish and Boat Commission's Class A wild trout streams, as HQ should not be automatic. They asserted that DEP should not defer its regulatory authority and/or responsibilities to the PFBC, who are not held to the same regulatory procedures or requirements. However, others supported Class A wild trout streams as HQ waters. Some commenters suggested that since most wild trout streams have water chemistry that is generally better than water quality criteria, all wild trout streams should be considered HQ. Others commented that the PFBC "Class" designation for trout streams is a reflection of trout biomass, and that it may be dependent on factors other than water quality.

Response: The Department uses proven scientific methodologies to perform chemical and biological assessments. The Department believes that waters should be able to qualify as HQ waters through an analysis of long-term chemical data, or by meeting biological criteria. Both methods measure long-term water quality conditions, and provide an excellent picture of the stream's ability to support propagation of fish, shellfish and wildlife and recreation in and on the water.

The Department has recommended a stand alone, long-term chemistry test as one means of qualifying for HQ protection. In the past, the Department has relied on a grab chemical sample coupled with a biological test. The grab chemical sample only provided an instantaneous snapshot of water quality whereas the biological test reflected long-term conditions. Because of this, the Department believes that another stand-alone option which petitioners can use is necessary.

The Department disagrees that scientific data needed to classify streams as HQ or EV has been reduced. The High Quality Waters definition is now consistent with the EPA definition and requires that waters possess quality that exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water. The previous definition, which EPA disapproved contained the phrase "...and environmental or other features that require special water quality protection." This reduced the number of waters that could qualify. As a result, more waters may qualify for HQ protection under this regulation. On the other hand, in order to qualify as an EV water, the candidate must first qualify for HQ, except where the surface waters are of exceptional ecological significance. The current program does not generally require HQ be met before a water is upgraded to EV.

DEP agrees the chemical parameters should be consistent with the HQ/EV definitions. The chemical parameters are specific to levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water. The Department agrees that nitrite plus nitrate nitrogen, manganese, sulfate and Total dissolved solids are water quality criteria designed to protect a potable water supply use and are therefore not necessary to determine whether a surface water meets the HQ/EV definition. They have been deleted from the final regulation. Total recoverable aluminum, dissolved arsenic, cadmium, copper, lead, nickel, zinc, and temperature have been added because these are naturally occurring aquatic life related compounds. The list of chemicals, when reviewed on a long-term basis, tells the "story" of the quality of the stream.

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The phrase "long-term" is defined by adding language to the final regulation providing that long-term water quality will be based on at least one year of data developed under quality assurance and quality control protocols.

The biological methodologies specified in the regulation are based on EPA's Rapid Bioassessment Protocols (RBP). They have undergone extensive peer review and testing. The Department employs a modification of EPA's Rapid Bioassessment Protocol (RBP) III for benthic macroinvertebrates based on Rapid Bioassessment Protocols for Use in Streams and Rivers: Benthic Macroinvertebrates and Fish, Plafkin, et al., (EPA/444/4-89-001). RBP III is a sophisticated sampling procedure using benthic macroinvertebrates, and provides an excellent picture of a stream's overall water quality. The final regulation further allows the Department to use widely accepted and published peer-reviewed biological assessment procedures as science in this area advances. Whenever the Department uses additional chemical and/or other biological assessment procedures than the minimum required by the regulation, a detailed description of the differences will be provided in the Department's Special Protection Evaluation Report for the candidate waterbody. A summary will also be included in the preamble to the proposed rulemaking for the surface water reclassification, which will be open for public review and comments.

The Department believes it is more defensible to house HQ and EV waters selection criteria in regulations rather than in a policy or guidance document since these criteria form the basis for redesignating waters for Special Protection. The benthic macroinvertebrate integrated metric score of 83 % of the reference stream or watershed has been in use since 1992. It has been thoroughly tested by DEP and it distinguishes between average streams and those deserving of Special Protection status. Moreover, the 92% score for EV was determined through best professional judgment, to reflect exceptional value waters from a biological perspective. Experience with this number since 1992 has proven that it has reflected outstanding waters of ecological significance.

The Department believes the biological selection criteria for HQ and EV waters will assure that streams deserving Special Protection qualify. For example, the Department has determined that the integrated benthic macroinvertebrate score of at least 83 % of the reference stream or watershed used in the HQ biological selection criteria separates those waters with average water quality from those with quality deserving of Special Protection. HQ waters must possess water quality better than that needed to support propagation of fish, shellfish, and wildlife and recreation in and on the water. EV waters must first meet the HQ requirements and then qualify under one of several criteria to merit an "outstanding" designation, worthy of the best streams in the Commonwealth, except for waters of "exceptional ecological significance", whose true ecological value is generally not measured by traditional water quality parameters.

The Department, in cooperation with the Pennsylvania Fish and Boat Commission, is currently developing fish metrics and a fishery based Index of Biotic Integrity (IBI) for Pennsylvania waters. Fishery data is currently being collected by both agencies. It will take a few years to establish a database. Once the fish metrics and IBI are finalized, the Department intends to incorporate them as selection criteria, subject to public review and comment.

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The Department currently selects reference streams to evaluate petitioned streams. The reference and candidate streams are, whenever possible, in the same subcoregion and have the same fishery type (cold water, warmwater). Reference streams closely match candidate streams from a physical, chemical and biological standpoint.

The Department believes that Class A Wild Trout Waters should continue to serve as a biological selection criteria for HQ waters as long as they are public noticed with an opportunity for comment by the PFBC. A stream or stream segment so classified and public noticed by the PFBC will be protected as a HQ water under the existing use provisions of the regulation.

ACTIVITIES VS DISCHARGES:

Some commenters said no Department permit or approval action should be completed until the Department has completed its Special Protection evaluation.

Other commenters, including US EPA, commented that antidegradation must cover all activities, not just discharges. A commenter also recommended that DEP either require no new or increased discharges or activities to EV streams or require bonding to cover the cost of failing systems.

IRRC questioned the DEP's rationale, which allows a stream to be designated as HQ or EV downstream from a stream segment with a lower designation. What are the impacts on those who discharge into the upper portion of a stream when the lower portion has a higher designation?

Some commenters stressed the Department should encourage a long-term goal of zero-discharge, consistent with the objective of the Clean Water Act.

Response The scope of activities subject to review is consistent with EPA's regulations. The Department requires that all existing uses be maintained and protected. This protection occurs during the evaluation of an application for a Department permit or approval, which could impact a surface water.

The Department does not believe it is neither necessary nor appropriate to require bonding beyond that provided for in express provisions of the Clean Streams Law related to mining.

The Department supports the Clean Water Act goal of "zero discharge" of pollutants. The final regulation requires that a person proposing a new, additional or increased discharge to HQ or EV waters evaluate non-discharge alternatives that are environmentally sound and cost-effective when compared to a stream discharge. If a non-discharge alternative is not cost-effective and environmentally sound, the discharge must utilize the best available combination of cost-effective treatment, land disposal, pollution prevention, and wastewater reuse technologies.

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Only stream segments classified as HQ or EV receive the protection of these classifications. If there is a discharge upstream from an HQ or EV water, effluent limitations must be established to maintain that classification.

THREATENED AND ENDANGERED SPECIES AND USE OF PNDI:

Some commenters suggested Endangered Species should only be considered in EV stream designations. Additionally, some emphasized that the species must be aquatic and dependent on water quality.

Other commenters, including the U.S. Fish and Wildlife Service, suggested that all endangered species that depend on water quality should be included in the definition of Surface Waters of Exceptional Ecological Significance. USFWS claims that insufficient attention has been given to threatened and endangered species throughout the draft proposal. U.S. EPA Region III said it will not approve the regulation unless all endangered species are protected.

Some commenters said limiting data searches to only species on the PA Natural Diversity Index (PNDI) ignores the fact that the PNDI is neither all-inclusive nor always up to date. It was suggested that one way to help resolve this is to require applicants for Departmental permits to consult with the U.S. Fish and Wildlife Service for information on listed species within the proposed project area early in the permit process.

Response: Pennsylvania's water quality criteria protect threatened and endangered species in all waters of the Commonwealth.

In response to comments, the Department has modified the language in §93.4c(a)(2).

The Department agrees that the PNDI database is not "all inclusive". Other organizations, such as natural resource agencies, museums, and universities may have information about threatened and endangered species that have not yet been provided to PNDI. By referencing PNDI in §93.4c(a)(2), the Department did not intend to imply that valid information from other agencies would not be considered. Therefore, the phrase "...LISTED IN THE PENNSYLVANIA NATURAL DIVERSITY INVENTORY (PNDD)..." has been removed from §93.4c(a)(2).

HQ AND EV AS WATER USES:

Some commenters supported withdrawing the Exceptional Value and High Quality water use designations. Other commenters commended the Department on its decision to include HQ and EV as protected uses in the ANFR.

Several commenters mentioned that the waters being redesignated as HQ or EV waters are not being upgraded; rather it is only recognition of what already exists.

Response: The Department has maintained High Quality and Exceptional Value Waters as protected water uses. This approach has been in place since 1978 and has proved workable since it integrates antidegradation management categories into the water quality standards program.

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EPA questioned the 3/22/97 proposal which would have removed HQ and EV waters; the existing quality of HQ and EV waters must be protected regardless of whether the waters are protected uses or not. Moreover, retention of uses for HQ and EV waters was supported by a majority of persons commenting on the issue.

The Department agrees that HQ and EV designations are a recognition of an existing condition.

USE OF GENERAL PERMITS IN SPECIAL PROTECTION WATERS:

A group of commenters having farming interests submitted approximately 600 comments, indicating that they oppose individual NPDES permits for CAOs in High Quality watersheds, and that if a permit is required, it should be a general permit. They do not believe the general permit issue should be delayed and addressed as part of the RBI final rulemaking.

Other commenters, however, supported the proposal to withdraw the use of general permits in HQ streams. Some commenters have recommended the Department expand this to also prohibit discharges under a general permit to any water that has not been assessed by DEP.

Response: The final regulation does not address the requirement for an individual permit in HQ watersheds. As part of its Regulatory Basics Initiative (RBI) proposing revisions to Chapter 92, the Department proposed allowing the use of general NPDES permits in HQ watersheds. The Department received a substantial number of comments on that proposal and will address them in that rulemaking package. However, the Department is addressing the current requirement to hold public hearings for every discharge to an EV water by deleting that section (§ 95.1 (c)) and including language that provides that a public hearing is required for point source discharge to EV waters only when requested by an interested party during the public comment period in the NPDES permit.

The Department's proposed Concentrated Animal Feeding Operation (CAFO) strategy requires an individual NPDES permit in Special Protection Watersheds because the existing regulations (Title 25, Chapter 92 -National Pollutant Discharge Elimination System) do not allow the use of a General Permit in Special Protection watersheds. This requirement will ultimately be dependent on the requirements established in the final RBI rulemaking for 25 Pa. Code Chapter 92.

EV CLASSIFICATION:

Many commenters said that DEP/EQB should consider the social and economic impacts an EV classification carries with it during the stream assessment process.

Comments submitted on behalf of the Pennsylvania Association of Realtors (PAR), Armco Inc., and others suggested that current antidegradation requirements are more stringent than federal requirements, and that exceeding the federal requirements is unnecessary and overly burdensome. IRRC stated in their comments on the ANFR that the DEP's definition of an EV stream should not be broader than the federal requirements. IRRC and additional commenters

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indicated that the Department's proposal should be consistent with the Governor's Regulatory Basics Initiative of Executive Order 1996-1. Otherwise, the DEP must provide justification or compelling reasons for continuing an EV designation process that is more expansive than the federal standards.

PAR said the issue of "takings" should be considered by governmental agencies when regulatory language is drafted or considered. They indicated that individuals should have the right to dispose of their private property in a reasonable fashion unhindered by government regulations that negatively impact the value of property.

A number of commenters were disappointed that DEP retained the phrase "surface waters" instead of replacing it with "watershed", especially in view of DEP's new emphasis on watershed management, and the recommendations of the 21st Century Environment Commission.

Commenters expressed concern that there is no mention of National (and State) Parks as part of the criteria in §93.4(b)(1) to be used in considering high quality waters. Presence of National Parks is part of the federal criteria. A commenter uses the example of the EV status of Valley Creek that flows through Valley Forge National Historical Park. It is possible that since National Parks are not part of the criteria the EV classification for Valley Creek could be removed.

Response: The federal CWA precludes the Department from considering economic or social factors in developing water quality standards. See 33 USC § 1313 (c) (2) (A).

The Department's EV definition is broader than EPA's Tier III definition; EPA's definition protects only outstanding national waters. The Department believes that outstanding state, regional, and local waters in the Commonwealth also merit protection and recognition as EV waters; this is a compelling justification for having a definition of EV broader than the federal Tier III.

Department regulations, including these regulations, are drafted mindful of the takings provisions of the United States and Pennsylvania Constitutions. These regulations represent a reasonable exercise of the Commonwealth's police powers and do not in any way prohibit all economically viable uses of a property owner based on the property owner's reasonable investment-backed expectations. The regulations do not affect the right to dispose of private property, and instead provide protection to the Commonwealth's best waters. Experience has shown that numerous discharge permits have been granted for discharges to High Quality and Exceptional Value waters.

The Department believes that watersheds are contained in the term "surface waters". Stream designations will continue to be made on a basin basis. Moreover, the Department has emphasized the "watershed" approach and the recommendations of the 21st Century Environment Commission in several ways in this regulation, most notably in the definition of "Coordinated Water Quality Protective Measures" which provides for the protection of watershed corridors as EV waters where local or regional governments have adopted sound land use water quality protective measures in waters which have the water quality of High Quality Waters or higher.

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The Department has added language to the final regulations which includes National Forests and Parks and State Forest and Park Natural Areas as Exceptional Value waters selection criteria. As a legal matter, no change is needed to the definition of "Surface Water of Exceptional Ecological Significance". The word "include" has the same legal meaning as "including, but not limited to".

IMPLEMENTATION GUIDANCE / SP HANDBOOK:

The Citizens Advisory Council (CAC) is concerned that SEJ and other important implementation details are to be addressed in the Special Protection Implementation Handbook, and that revisions to the Handbook are being delayed. They believe that the issues that are to be addressed in the Handbook are critical to the program and deserve (require) public review concurrent with the review of the regulations. The CAC suggested that a draft of the revised Handbook be made available for comment before the rulemaking goes back to the EQB for consideration in. Another commenter requested that the Department issue a revised Handbook within the next 6 months, and to hold a formal comment period of at least 60 days on the implementation document.

Response: The Department will begin the task of preparing necessary implementation guidance to support the final regulation once the content of the regulation is certain. Substantial changes to the existing Special Protection Waters Implementation Handbook will be made, as necessary, and will undergo public notice with an appropriate comment period. The establishment of a date when this guidance will be available cannot be determined at this time.

IMPACT ON AGRICULTURE AND OTHER LAND USES:

Many commenters associated with farming and/or the agricultural trades, real estate, construction, development and/or the building trades said the draft final regulations will hurt agriculture and/or the farmers' ability to continue farming, and the builders and/or developers' ability to develop their property in those areas near HQ or EV streams. Many commenters claimed that the increased burden and regulatory controls will increase the costs to the farmers, builders and developers who develop property near a High Quality or Exceptional Value stream. They said the regulations are stricter than federal standards, and/or that the current federal promulgation has provided regulations with adequate protection since 1996.

Other commenters claimed that the regulations will continue to give certain groups the means to use HQ and EV stream designations as a method to restrict agricultural and landowners' activities, and to use the Special Protection Program as a tool to halt economic growth and development. Some commenters suggested that farmers are stewards of the land that provide income, and they do not purposely hurt the land that feeds them.

Response: The ANFR requires the Department to assure that cost-effective and reasonable best management practices for non-point source control be achieved. This requirement tracks language in the federal regulation at 40 CFR § 131.32(a)(2). Existing requirements in Chapters 102 and 105, the Nutrient Management Act and the Manure Management Program will continue to govern. There are no new or additional requirements in the ANFR regarding farms in HQ or

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EV waters. In March, 1999, the Department finalized its CAFO strategy which describes requirements applicable to farming operations that are required by the Clean Water Act (CWA) to obtain a NPDES permit.