



Association of State and Interstate
Water Pollution Control Administrators



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April 22, 2005

Ms. Diane Regas
Director, Office of Wetlands, Oceans and Watersheds
U.S. Environmental Protection Agency
Mailcode 4101T
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Draft Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act, February 22, 2005

Dear Ms. Regas:

Thank you for extending the comment period on the *Draft Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act* (IRG). The additional time allowed the States and Interstate Agencies to further confer among ourselves and with USEPA staff on several important matters relating to the listing and TMDL development processes. We also appreciate the time and level of commitment you and others have put forth on developing and revising the IRG over the last several months.

As you noted in your comments to the ASIWPCA membership at the Mid-Year Meeting in early March, over the last several years States, Interstate Agencies and USEPA have made great progress in developing a large number of TMDLs, often under difficult and time-constrained conditions. The numbers are indeed up, reflecting a commitment on our part to the national water quality program. However, numbers alone can be deceiving and we should not mistake TMDLs produced for actual improvement in water quality. In that respect, we are concerned that whatever progress we appear to have made may unravel if certain approaches specified in the IRG are adopted. Given that you could approve the IRG in the next few weeks, this would allow States and Interstate Agencies that propose to file Integrated Reports (IR) by April 2006 limited time to draft their 2006 IRs. Therefore, we ask that you carefully consider the following.

The 10% Rule

Section IV—G (How should statistical approaches be used in attainment determinations?) is problematic for many States' data assessment approaches. The "10% of samples exceed the water quality criterion" approach was traditionally recommended by USEPA (1997 305(b) and 2000 CALM) for making nonattainment decisions for "conventional pollutants". Consequently, this is the basis of the assessment methodology currently used by many States. This section recommends not using this traditional §305(b) approach, unless it is consistent with the manner in which applicable water quality criteria WQC are expressed. This represents a fundamental shift in our long-standing, federally-guided assessment approach.

States and Interstate Agencies recognize that numeric WQC should include three components—magnitude, duration, and frequency—yet since the 1970s, many States have simply adopted the original USEPA criteria language without explicitly specifying all three of these components. In fact, as adopted, most State WQC are expressed either as instantaneous maxima (or minima) not to be surpassed or average concentrations over specified times. Compounding that problem, most States’ ambient monitoring activities result in the collection of grab samples on a monthly, quarterly, or annual frequency. This is often insufficient for strict interpretation of the specified criterion duration (averaging period) or criterion frequency.

An unintended consequence of requiring strict application of standards to monitoring data may be States’ revising water quality standards. This revision, to accommodate assessment methods, could adversely affect other uses of standards such as development of permit limits.

Another unintended consequence of abandoning the 10% rule is that States will list significantly more waters using USEPA’s “zero tolerance” approach to assessment data interpretation. In turn, more TMDLs will need to be produced, based on limited, and arguably often inconsequential, indicators of impairment. Using the 10% method enables States to appropriately focus limited resources for TMDL development and implementation on those waters with the most significant water quality problems that are truly impaired.

Our interpretation of the 10% rule in the IRG is limited in two respects: 1) USEPA intends to elaborate further on this matter in the planned statistical techniques appendix to the IRG, as indicated on page 35—this appendix was not published and without that information for review, we cannot support USEPA’s scuttling of the 10% approach; and 2) We ask what constitutes “conventional pollutants”, as used in the IRG.

Recommendation: Retain the 10% rule. Recognizing that monitoring frequency often inhibits a strict application of WQS, USEPA should support State and Interstate Agency continued use of this assessment tool. States should have adequate flexibility and time to revise their WQS and assessment programs, if necessary, to address application of frequency and duration of standards in assessing ambient water quality data.

Independent Applicability

States have understood for some time that WQC may limit the means and methods by which assessments may be made. We have over time relied on biological indicators to provide a greater level of confidence in our ambient assessments. This approach has been reviewed and recommended by USEPA:

“USEPA believes that a valid assessment of a water’s condition should involve drawing conclusions beyond those which would be arrived at by taking into account nothing more than what was directly observed in the tiny fraction of all possible waterbody conditions over a given span of time and volume of space represented by a typical set of ambient data.” (IRG, page 33)

USEPA justifiably recommends using biological data for assessing aquatic life use support:

“States should include biological assessments in the data and information they assemble and evaluate in developing their Integrated Reports.” (IRG, page 37)

As in the case of the 10% rule, USEPA’s notion of independent applicability in the IRG appears to cast aside a longstanding matter of States’ proper use of Federal guidance and appropriate scientific methods. In contravention of previous guidance (CALM, July 2002, to name one), the IRG indicates that single types of data can supersede others, that biological data should not generally be used in place of or to override the conclusions of available water chemistry or other data.

"In instances in which the indication of aquatic life use support provided by biosurvey data and that provided by chemical and/or physical data differ, USEPA continues to support the principle of independent applicability (IRG, page 37)...When evaluating multiple types of data (e.g., biological, chemical) and any one type of data indicates an element of a water quality standards (WQS) is not attained, the water should most likely be identified as impaired." (IRG, page 40)

Although the IRG does indicate that one should not "[A]lways assume that a single sample result showing impairment outweighs all other data showing attainment" (IRG, page 40), USEPA provides very few reasons why such a single sample should be ignored or outweighed by other data.

Biological assessments should be a fundamental tool of all State monitoring programs. If States are not using them now they should receive assistance in adapting their current programs. The value of biological data is this:

"Both the under- and overprotective tendencies of a chemical-criteria-only approach to water quality management can be ameliorated by joint use of chemical criteria and biocriteria, each used within their most appropriate indicator roles and within an adequate monitoring and assessment network." (National Research Council, "Assessing the TMDL Approach to Water Quality Management", June 2001, page 37)

Many States maintain and scientists support that actual assessment of the instream biological community is the best indicator of the health of that community regardless of whether chemical-specific criteria are met. The unintended consequences of such a change in the assessment approach includes more listed waters that may not be truly impaired, the re-prioritizing of impaired waters and TMDLs, and an inability to issue NPDES permits for additional loads to these waters. Is this scientifically supportable and are the implications defensible? Is this the appropriate means of determining impairment given limited resources and time? To produce the 2006 list in a timely manner, State's caution that there is not time to make significant changes in direction, revising State regulations, rules or guidance.

Recommendation: USEPA should not direct or limit appropriate data use in assessments. Biological data are fundamentally important to our evaluation and understanding of water quality. States and Interstate Agencies should continue to use the best information and scientific methods available, including the use of biological metrics.

Cost/Benefit Data

While many States provide certain types of data approximating the cost of the assessment program and relative benefits from monitoring/assessing/permitting, all associated with the water program, the level of information USEPA suggests States submit as "economic and social costs and benefits" (page 15 of the IRG) certainly exceeds this effort. More importantly, it exceeds the type of information we, as State water quality managers and staff, are capable of collecting and evaluating. This is all interesting information but may not be readily available to the States (e.g., operation and maintenance costs for industrial facilities). Rather than simply re-state the Clean Water Act requirement for the data, USEPA should provide guidance and useful tools to help State and Interstate Agencies systematically and consistently make such *estimates* (e.g., surveys/questionnaires of selected industries). While this is indeed a requirement of Section 305(b), there has been minimal emphasis on including this in traditional 305(b) Reports.

Recommendation: In order to provide national consistency and data comparability, USEPA should provide adequate tools to States and Interstate Agencies regarding water quality programmatic costs and benefits.

Methodology Approval from USEPA

In prior draft rulemaking on 40 CFR 130, USEPA proposed that States submit the assessment methodology for review and approval prior to submittal of the 303(d) List. We found this to be highly problematic and the rule, for a variety of reasons, was never adopted. The IRG, while appearing to offer USEPA's review of the methodology as an option—"USEPA strongly encourages States to submit their draft and final methodologies to USEPA for review and comment (but not formal approval), well in advance of any deadline the State sets for submission of data and information by parties or persons other than the State water quality agency" (IRG, page 26)—really offers States no choice. Without Federal approval of the methodology in advance of the IR submittal, particularly in light of the revisions in policy cited above, States are at significant risk of running afoul of Federal interpretation of the State's own WQS, the State's methodology and the IRG. What we sought to avoid in rulemaking several years ago—an untenable position of two agencies (USEPA and a State) interpreting both the standard and the method by which the standard is measured—has now become a significant part of this guidance. This was a poor idea then and it has not improved with age. Since the IRG is intended to be guidance only, it should create a clear path through existing regulations, delineating for States how USEPA will review the State's methodology.

Recommendation: USEPA should not approve or disapprove assessment methodologies. USEPA should revise the IRG so both States and USEPA are provided a means to improve methodologies and their relevance to WQS.

Threatened Uses and Antidegradation

Category 1 waters are defined as those where "All designated uses are met, no use is threatened, and the antidegradation policy is supported" (IRG, page 7). The requirement to assess all three of these conditions will make it extremely difficult for States to uniformly and consistently place waters into Category 1. As a result, the public's perception of the national water quality management program will be erroneously and adversely altered. Moreover, such a three-part approach to Category 1 expands the scope of the list beyond the original intent.

The task of identifying threatened waters and determining compliance with the antidegradation policy in the listing process adds a significant additional burden to the States. To further complicate the issue, both requirements are subject to considerable interpretation. The IRG does not clearly provide a process under which States and USEPA determine the degree of the threat and compliance with the antidegradation policy.

We object to listing threatened waters as impaired. Even though USEPA tries to legitimize these listings by requiring State and Interstate Agencies to use a "valid statistical methodology" (IRG, page 54), thereby making this process meet some arbitrary level of scientific or mathematical correctness, statistical methods cannot change the fact that threatened waters, at the time of listing, still meet their designated uses. In listing threatened waters, the distinction between waters that are truly impaired and those that *may* become impaired becomes blurred. If we develop lists that contain both impaired waters and waters that we think might become impaired: our judgment and methods become suspect and subject to legal challenge; the public's perception of what is actually impaired and their future participation in the implementation of cleanup strategies are placed in jeopardy; and the efficacy of the TMDL and antidegradation programs is at risk.

We question the statutory basis to require listing of threatened waters. Furthermore, determining that a use is threatened is a very subjective process. It is difficult enough for States to develop and implement methods that consistently yield definitive answers to relatively clear-cut questions concerning current use attainment. Predictive tools are even more elusive, due to natural variability in water quality data and the cyclic nature of weather and flow patterns.

Some States have defined their antidegradation policy in waterbody-specific terms while others use a parameter-by-parameter approach. In either case, the determination of Category 1 qualification will require States to go beyond the baseline assessment of Tier 1 uses and evaluate the condition of the waterbody with respect to best-attainable or reference quality. This is a considerable workload for States. Case-by-case antidegradation analysis will slow the progress of listing waters that truly need a TMDL. We believe the intent of Section 303(d) is best served by defining Category 1 for waters where “All designated uses are met”. Again, predictive methods used to assess future threats to waters are speculative and generally unreliable, and evaluation of State antidegradation policies is complex and best left to a separate and independent effort. Application of antidegradation policies is typically a component of permit issuance and not data assessment.

Recommendation: Threatened waters are not impaired and should not be listed. USEPA and States should continue to coordinate efforts to uniformly identify threatened waters. Antidegradation assessment is more properly a function of permitting, not assessment. USEPA should not stretch assessment and listing to address these elements that are already, and better, handled elsewhere in the water quality program.

Category 4B

We are generally pleased with the efforts made to improve Category 4B. Our discussion at the Mid-Year Meeting with USEPA staff made it clear that USEPA intended to accept the nine minimum elements of an applicable and pollutant-appropriate Section 319 project as an adequate demonstration of what may constitute “pollution control requirements” (IRG, pages 49-50). We believe the 319 elements clearly meet the three specific criteria (authority under which the controls are required, commitments made by the sources, and availability of funds) USEPA needs to determine Category 4B eligibility. This concept should be more clearly stated in the IRG.

Recommendation: USEPA should clearly state the link between Category 4B and the required elements of 319.

Listing Based on Unknown Causes

Many States have now established “planning” or “preliminary” lists for waters that may be impaired except that data are insufficient to allow a proper and defensible determination or the development of scientifically sound TMDLs. Planning lists allow the public to review the determination and the State or Interstate Agency actions to advance the understanding of the status of that waterbody. In previous discussions USEPA, and certainly the National Research Council in its report of June 2001, promoted the use of such lists. Without properly assigned causes of impairment, States are flying blind in any attempt to develop TMDLs for unknown or poorly substantiated causes. The collection of data is clearly the first step in making that determination—placing these waters in Category 5, in the face of poor data, is not the most efficient means of dealing with these waters. Since several States have employed “planning” or “preliminary” lists for some time and the IRG may now cause those States to revise State rules and procedures, we ask that you reconsider Category 5 guidance to recognize that States have flexibility to continue to operate in this manner.

Recommendation: USEPA should support the use of planning lists in the IRG, and revise the IRG to recognize that this method can be used to address unknown causes and insufficient data.

Use of Data Age and Outliers

States and Interstate Agencies should be able to employ a “presumption” relative to old data so long as sufficient rationale is provided. USEPA takes what we consider to be an overly prescriptive approach on two important subjects concerning data representativeness. USEPA states that “[D]ata should not be excluded solely on the basis of age without supporting information showing that these data are no longer representative” (IRG, page 31).

USEPA also indicates that “[S]tates should be cautious about employing assessment methodologies that exclude data from further consideration based on a finding that it is unrepresentative because the data seem to reflect unusual circumstances.” While it is true that “short-term” events can cause potential adverse effects, waterbodies can reasonably be excluded by the State based upon such events. For example, brief but intense storm events in an arid environment can scour a stream. USEPA’s reference to the “Guidance for Data Quality Assessment: Practical Methods for Data Analysis”, as it addresses outliers, is not on point and represents an entirely different factual situation. As we indicated in previous comments, this is another example of the IRG boring down to a level of inappropriate detail.

Recommendation: USEPA should revise the IRG to recognize States and Interstate Agencies have the flexibility concerning data age and outliers. It is the proper role of the States and Interstate Agencies to determine data quality and representativeness.


Other Comments

It would be helpful for the 2006 Integrated Listing guidance to further address how Interstate Commissions should reconcile their 305(b) reporting responsibilities with the 303(d) listing responsibilities of the States so as to maximize consistency.

While USEPA wants to encourage multiple categories per assessment unit, any changes made to the structure of the Assessment Database (ADB) to provide greater flexibility should not hinder the continued use of the one-category system.

Individual States and Interstate Agencies may provide comments on these or other issues and we ask that you also consider them carefully. We recognize in making these comments that States, Interstate Agencies and USEPA have joint responsibility in this program area that requires a high degree of cooperation and consultation. Again, I sincerely appreciate your efforts over the last several months in improving the listing guidance and in collaborating with us to do so. If you determine that guidance must be issued promptly to meet the needs of States and Interstate Agencies to make the April 2006 deadline, I ask that you further consult with State and Interstate Agencies on any additional revisions you may make to the IRG as a result of these or other comments you receive.

Sincerely,



Arthur G. Baggett, Jr.
President, ASIWPCA