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December 14, 2000

Susan Holdsworth  
Office of Wetlands, Oceans & Watersheds  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Dear Susan:

The Association of Metropolitan Sewerage Agencies (AMSA) appreciates the opportunity to provide comments to the U.S. Environmental Protection Agency (EPA) on its draft outline for the Consolidated Assessment and Listing Methodology (CALM). AMSA has been represented at all of EPA's CALM development meetings and we plan to continue our active participation in all future meetings. AMSA's 256 publicly owned wastewater treatment agency members bring to the CALM initiative a wealth of experience and information on the subject of water quality monitoring and assessment. It is AMSA's position that if TMDLs have any chance to succeed, they must first start with accurate information on water quality – states must be held to a high standard for decisions that will pose tremendous burdens on municipalities in terms of treatment upgrades. For this reason, AMSA members support EPA's development of the CALM document as a means of assuring that state 305(b) assessments and 303(d) listing decisions are based on sound data quality and monitoring protocols. Without this foundation, both procedures are meaningless.

As an opening comment, AMSA commends EPA for keeping this project open to the public. We encourage the Agency to remain faithful to this open process at every stage in the development of CALM. This will encourage a greater exchange on how best to make the state monitoring and assessment process more transparent.

### *General Comments*

At this stage in the project, AMSA recognizes that the draft document is only a skeletal outline of what will become a more fleshed-out strategy. However, our members found it difficult to provide extremely detailed comments when many of the explanations and recommendations are either missing or stated in such a vague and extremely general manner. AMSA will be able to provide more targeted comments when the outline goes beyond raising questions to making specific recommendations and providing the range of acceptable decision criteria as to how these issues can be resolved.

### **Monitored v. Evaluated Data**

The draft outline does not provide a detailed discussion of how CALM will differentiate between “monitored” versus “evaluated” data. The document raises questions about monitoring in Section 13, but it does not go beyond this surface level discussion. While EPA’s intent might be to favor “monitored” data in listing decisions, the outline does not require any minimum amount of monitoring before an impairment determination is made. In fact, the document does not even refer to a minimum amount of monitoring for the purposes of calibration and validation of models. AMSA recognizes the resource limitations currently facing the states. However, this is an extremely important issue that needs to be more thoroughly addressed.

AMSA understands from attending EPA’s CALM outreach meetings that the Agency plans to encourage states to utilize a mixture of monitoring approaches, including both measured and probabilistic data, to ensure that the states are at least covering with some type of monitoring all navigable waters within their territory. The Agency has verbally clarified that Section 305(b) assessments should be geared at providing a means for targeting further study and state follow-up monitoring. Once the state has a general idea of which waters might need more data, the state should conduct more targeted sampling of those priority streams. The sampling data would then be used to make Section 303(d) determinations which EPA acknowledged must, by regulatory necessity, require a greater amount of scientific certainty.

AMSA believes that using a mixture of actual monitoring and probabilistic data for Section 305(b) purposes is acceptable, as long as this information is used only to identify those waters where more monitoring (i.e., actual sampling) is needed to determine its compliance with water quality standards. Section 305(b) reporting should have no regulatory implications for Section 303(d) unless it is based on actual measured data. AMSA recommends that the CALM document include a statement regarding the required use of actual monitoring data to make state Section 303(d) listing decisions.

### **Section 305(b) Reporting Procedures for Waters with Insufficient Information**

As stated above, EPA appears to favor an approach which would allow states to use a mixture of monitoring and probabilistic data, or solely probabilistic data, to assess waters under Section 305(b). The Agency has further clarified that Section 305(b) should be used by states as a tracking mechanism for

follow-up monitoring. Therefore, a state could track waters that perhaps showed some signs of impairment, but for which an insufficient amount of or no actual data existed to make a formal determination. The Agency indicated that while Section 303(d) does not authorize a “maybe list”, Section 305(b) would be the appropriate place for a list of “waters where insufficient or no data is available to make an evaluation.” AMSA recommends that CALM clarify that the Section 305(b) should be organized to separately list waters with insufficient or no data available.

### **Minimum Standards for Section 303(d) Listing Determinations**

CALM should strive to advance some minimum definition of standards that states must meet in making appropriate listing decisions. CALM does not directly address what the term “impairment” means. Many questions remain unresolved at this juncture. What are the standards by which we should define an appropriate impaired segment? For example, one data point out of 200 showing levels above the water quality criteria – is that impairment? Further what degree of statistical confidence is required or suggested before impairment determination is supportable? These issues have enormous consequences for dischargers both in and out of the defined segment. AMSA recommends that the next version of CALM include specific recommendations on the minimum standards for Section 303(d) determinations, such as minimum criteria regarding sampling frequency, age of data (i.e., no data should be older than 5 years), and the effects of seasonal variability. AMSA is opposed to allowing unlimited flexibility to the states in designing their monitoring programs – if the CALM effort is to be successful, some minimum standards must be required.

In addition, AMSA recommends that CALM require that all state programs include the following elements:

- (1) All programs must have an approved Quality Assurance Project Plans (QAPPs);
- (2) All programs must be open to using valid third party data, where available and where it meets minimum data quality standards; and
- (3) In the assessment process, states may only use standards that have been promulgated under the rulemaking process.

### **Use of State-Adopted Water Quality Standards in 303(d) Listing Decisions**

Section 303(d) listing decisions must be based on existing water quality standards which are promulgated in accordance with the state’s rulemaking process. It stands to reason that the sole yardstick for assessing attainment (i.e., water quality standards) must be officially promulgated as part of the state’s rules and regulations before they can be used to determine an impairment. This is especially true for bioassessments and other data sources that fall outside the traditional state water quality standards. Each use classification should have its own criteria for the listing of impaired waters and these criteria should be based on approved state water quality standards for that use classification. AMSA recommends that

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EPA state unequivocally in the next version of CALM that only state-promulgated standards will be used to determine attainment.

In addition, in terms of narrative water quality standards, the next version of CALM should require that states adopt and apply their required translator mechanisms before attempting to base an impairment finding on a narrative standard.

### **Voluntary Exchange of Effluent Data for Instream Monitoring**

To date, state resource problems have posed serious limitations on the scope and quality of the 305(b) assessments and 303(d) listings. AMSA believes that one way to alleviate these problems is for CALM to recommend that states allow POTWs and other point sources to exchange some of their required effluent monitoring for in-stream monitoring. This voluntary exchange would help states reach more streams with ambient monitoring. We emphasize that this program must be kept strictly voluntary, and must not be adopted as a mandatory NPDES permit condition.

EPA's position on the use of third-party data appears to be somewhat noncommittal. AMSA believes strongly that EPA and the states must begin to accept valid third-party data in order to allow regulators to maintain the best available database for making decisions regarding water quality. Valid data should be governed by requirements for QAPPs and other data quality guidelines, etc., matching the validity used for state data. States should develop uniform third party QAPPs to be used by all stakeholders wishing to submit data.

In order to encourage and advance the use of third party data, the Office of Wetlands, Oceans & Watersheds should consider developing a new page of its "Watershed Protection" website to provide specific information on individual state monitoring programs and the use of third party data. The page should include examples of third party water quality monitoring programs to compliment the description of state monitoring programs.

### **Section 106 Adequate Elements of Monitoring Program**

As part of the congressional appropriation of \$172 million for the Section 106 program to support appropriate state monitoring procedures, EPA has indicated that it is developing a list of "Minimum Adequate Elements" that each state must meet to secure funding. AMSA understands that these "minimum adequate elements" will be attached as an appendix to the CALM document. AMSA supports using Section 106 monies as an incentive for states to meet certain minimum data quality and monitoring elements. This could be one of the more effective ways to improve state monitoring approaches and documentation.

AMSA requests the opportunity to review and comment on EPA's proposed minimum elements once the internal review process is completed. At a minimum, AMSA will recommend that the following conditions apply before a state can receive funding: the use of actual monitoring data only for 303(d) listings; the submittal of a state monitoring strategy; documentation of state data quality standards; and the use of approved WQC and WQS only for 303(d) listings.

### **Delisting Waters**

AMSA recommends that the CALM document clarify the process for "delisting" waters. In particular, EPA should state that the same type of scientific criteria used for "listing" waters on a Section 303(d) list be used for delisting waters.

### **CALM References**

As a minor point, several references were made in the outline to other Agency documents, but no link was provided to those publications. AMSA recommends that future versions contain links to all referenced documents, or that they be more easily accessible as attachments.

## **PART A**

### **Section 2**

The draft outline does not set out a recommended federal standard for data quality (for example, "reasonable scientific certainty"). Rather, the document urges states to "use all available data that meets your data quality requirements ... ." Hence, the degree of rigor required by the states will vary and many states may not be able to articulate the standards they are applying. AMSA recommends the adoption of minimum federal standards for data quality which assure that the data meets a standard of "reasonable scientific certainty". In other words, the uncertainty of the data can not be so great as to exceed or otherwise overwhelm the decision threshold used to assess compliance.

#### **Section 2.2**

Although no uniform federal data quality standard is articulated, Section 2.2 addresses critical components of the data gathering and analysis process. This section requires states to articulate their data quality objectives, the consequences of making erroneous decisions, data quality and quantity needs, QA/QC and data interpretation procedures. AMSA supports these requirements. States must be required to explicitly address all these issues when conducting an assessment or making a listing determination.

In addition, AMSA notes that the outline does not address a federal guideline or standard for the maximum permissible age of data to make listing determinations. AMSA recommends that the next version of CALM include a specific recommendation that assessment data older than five (5) years should not be used by states for either Section 305(b) reports or 303(d) listing decisions.

### **Section 3.4**

Section 3.4 references the use of “rule of thumb” decision thresholds for conventional pollutants and toxic contaminants in the water column. What exactly does that mean? AMSA recommends that this term be further defined or clarified.

The section also recommends the inclusion of “documentation of the likelihood of detecting an exceedance of the numeric criteria and the level of statistical confidence in the attainment decision given the sample size.” AMSA believes that this recommendation will be helpful and states are well-advised to adopt such an approach.

### **Section 4**

Section 4 refers to the use of biological data in making impairment decisions. The problem with the use of bioassessments to determine impairment has always been that without specific and properly-adopted biocriteria (i.e., specific metrics on the type, amount, diversity and functional relationships of the organisms), such assessments are not legal, because they do not constitute valid water quality standards, and are inherently arbitrary and capricious.

The first issue is that CALM should require states to formally promulgate the biological standards as water quality standards (WQS) before using biological data to make impairment findings. It is not sufficient to say that biological criteria are adopted, sub silentio, by virtue of a properly-adopted general designated use or narrative criteria. (Section 5.3 seems to accomplish this by requiring biocriteria to be adopted as WQS through a “detailed” designated use classification, numeric criteria or translator mechanisms ... .”) AMSA cautions that there can be no other alternative outside lawful adoption of the standard. The specific biological test or reference standard – whatever it may be called – must be lawfully adopted into the state’s WQS and must be articulated in a clear and objective standard.

The second issue – the articulation of the biocriteria in a clear and objective fashion – is necessary to avoid arbitrary and capricious decision making. At Section 4.3, CALM articulates the basic elements of a defensible standard (i.e., defined metrics, established thresholds, documented monitoring and analytical techniques). AMSA believes that Section 4.3 does an acceptable job, again in a very general manner, of articulating the minimum requirements for biocriteria. AMSA recommends that additional specificity be provided not only within the CALM document, but also that states be required to establish minimum elements of a defensible standard before biocriteria can be used for Section 303(d) listing decisions.

AMSA also believes that it is imperative that the basic elements of biocriteria define how the criteria is used with respect to defining and addressing impairments when both pollutant impairments and those caused by pollution are involved. This is critical to the Section 303(d) listing process in order for states to know on which list the water body belongs. If it is impaired by pollution the water is placed on a list

which is different than if the impairment is caused by pollutants. A confusing situation occurs when waters are impaired by both pollution and pollutant impacts. For some of these waters, attainment of water quality standards may be impossible, even after full implementation of a TMDL for all sources of “pollutant” impairments, due to the historic impacts from “pollution”. How should these waters be listed? AMSA recommends that CALM recognize the need to separately list or identify those waters which will or may remain impaired after TMDLs. Because the CALM strategy will form the basis for state actions, the issues should be addressed in this guidance.

### **Section 5**

The toxicity discussion in this section is far too brief, and it is difficult to provide feedback at this time. The use of toxicity data in making impairment findings is a critical issue. Much more information will be needed in this section before we will be able to provide useful comment.

Whole effluent toxicity (WET) test results should not be used to assess water quality in either the Section 305(b) or 303(d) procedures. WET tests, which use carefully controlled laboratory conditions, do not mirror the physical, chemical, and biological complexities of receiving streams. (see, *Evaluating WET Testing as an Indicator of In-Stream Biological Conditions*, WERF Project 95-HHE-1, 1999).

### **Section 7**

The use of physical habitat data should be included within the acceptable assessment schemes. However, such data should not be used for Section 303(d) listing of impaired waters, unless states adopt habitat standards through the rulemaking process.

### **Section 8**

Section 8 raises the issue of how states are to use other types of data (i.e., fish consumption advisories, beach closures, etc.) but does not offer guidance or recommendations on specific ways this information should be used. These are important issues. However, until specific guidance is supplied, which is desperately needed in this area, it is difficult to provide the Agency with targeted comments. We acknowledge that EPA recently issued guidance on the use of fish consumption advisories in the Section 303(d) listing process. AMSA members have serious concerns about this document. AMSA has argued both in its *Evaluating TMDLs . . . Protecting a POTW's Rights* publication and in comments on proposed TMDLs that it is inappropriate for EPA or a State to interpret a narrative water quality standard using fish consumption guidelines without the use of a promulgated water quality criteria or translation method.

### **Section 9**

Section 9 clarifies that EPA's independent applicability policy indicates that states should “presume an adverse impact when any one type of data indicates an adverse impact.” In this context, AMSA

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recommends that in the place of an adverse impact presumption, EPA should require a site-specific study to be conducted before the final assessment determination can be made.

Thank you for your consideration. Please feel free to call me if you should have any questions or would like to discuss any of these matters in greater depth at 202/833-9106.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Hoeke". The signature is fluid and cursive, with a large initial "M" and a long, sweeping tail.

Mark Hoeke

Director, Government Affairs

cc: Norm LeBlanc, Chair, AMSA Water Quality Committee