

October 12, 2006

**MEMORANDUM**

SUBJECT: Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions

FROM: Diane Regas, Director  
Office of Wetlands, Oceans and Watersheds

TO: Regions 1–10 Water Division Directors  
Robert Maxwell, Director, Office of Environmental Measurement and Evaluation,  
Region 1  
Barbara Finazzo, Director, Division of Environmental Science and Assessment,  
Region 2  
Gale Hutton, Director, Environmental Services Division, Region 7  
Bill Riley, Director, Office of Environmental Assessment, Region 10

I am pleased to enclose information to assist in the preparation and review of 2008 integrated water quality reports that are to be submitted by April 1, 2008. Consistent with the consensus of States, EPA recommends that these reports follow the ***Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act*** (2006 Integrated Report Guidance (IRG)) issued July 2005 (available at <http://www.epa.gov/owow/tmdl/2006IRG/>) as supplemented by this enclosure and its attachments.

A goal of the 2008 IR cycle is to achieve 100 percent on-time submittals of the Integrated Reports (all 56 States and Territories by April 1, 2008). To assist in attaining this goal, EPA is providing this information well in advance of the report due date, we are recommending best practices that have been used by States and EPA Regions to meet previous IR deadlines, and we will be evaluating and providing technical and other assistance on a case-by-case basis. Timely submittal and EPA review of integrated reports is a key to demonstrating State and EPA success in accomplishing our strategic plan goals for restoring and maintaining the nation's waters. To that end, today's enclosure includes:

1. A compilation of best practices employed by States/Regions to complete the development/submission of effective 303(d) lists on time;
2. A statement regarding the continued commitment to support and populate the Assessment Database (ADB) and/or compatible data management systems, document restoration, and streamline data review;

3. A discussion on the use of assessment results from State probability surveys to generate Statewide summaries;
4. Additional information on the use of partial approvals/deferrals for 303(d) lists;
5. Additional clarification on the use of Category 4b;
6. Greater consideration of the watershed approach when States are developing their 303(d) lists, priorities and schedules;
7. Continuing improvements in State monitoring and assessment programs;
8. Additional discussion on appropriate decision making regarding “natural background conditions;” and,
9. Further information on how to address listing of waters impaired by mercury.

The enclosed information is consistent with the 2006 IR Guidance and the current statutory regulatory framework under CWA Sections 303(d), 305(b) and 314.

I appreciate the specific efforts of the States, interstate commissions, and Regions that brought these issues to our attention and provided the information used in this enclosure. Thank you all for your continued hard work and dedication in developing the integrated reports. If you have any questions or comments concerning this memorandum, please contact me or have your staff contact Michael Haire at 202-566-1224.

Enclosure

cc: Regional Section 303(d) Coordinators  
Regional Monitoring Coordinators  
Linda Eichmiller, Association of State and Interstate Water Pollution Control  
Administrators  
Tom Stiles, Kansas Department of Health and Environment  
Darryl Joyner, Florida Department of Environmental Protection  
Glenn Rider, Pennsylvania Department of Environmental Protection

## INFORMATION CONCERNING 2008 CLEAN WATER ACT SECTIONS 303(d), 305(b), AND 314 INTEGRATED REPORTING AND LISTING DECISIONS

### **1. A compilation of best practices employed by States/Regions to complete the development/submission of effective lists on time**

A priority goal of the 2008 IR cycle is to have all 56 states and territories submit their water quality reports by April 1, 2008. Over the last few submission cycles, it has become apparent that some States and Regions have been quite successful in meeting submission and review deadlines. Obviously, a “one size fits all” approach to list development and approval is not feasible given State-specific differences in water quality standards (WQS), assessment methodologies, required review and comment schedules, and State rules (see also Attachment 1). However, the following compilation of best practices has been employed by various States/Regions that have helped facilitate the completion and submission of effective water quality reports in a timely manner.

- *Cultivating a sense of commitment*  
“Our [State] Agency and Bureau are very much committed and have directed the staff to develop a process that ensures timely submittal of these reports. The Bureau of Water Management has for years given utmost priority and committed adequate resources to have these reports submitted to EPA on time. This in turn allows all of the frontline managers and staff to be proactive and work hard to meet the deadlines.”
- *Establishing clear lines of responsibility*  
“Our [EPA] Region has found that after we assigned a staff person to function as the ‘point person’ for a particular State, we were able to expedite the resolution of problems as they arose. This greatly assisted us in not only receiving more timely submissions, but sped up the approvals as well.”
- *Developing an effective process*  
“We [the State Bureau of Water] have actually developed a schedule of when certain activities need to get done in order to meet the April 1st deadline. To develop the timeline, we start with the April 1st date and work backwards (and build-in extra time [for] each activity).”
- *Early Region to State communications*  
“It was our [EPA] Region’s experience that to assure more timely submissions, we became engaged with the States 12-18 months in advance of the April deadline. We asked for drafts of the State methodologies, draft lists/partial lists, and the identification of ‘potential show stoppers’ as early as possible.”
- *Promoting program integration*  
“Our [State] Agency interacts with other Bureaus in the Agency and incorporates relevant information into these reports. The Bureau has eight Regional areas that conduct the majority of the sampling and assist in tasks related to completion of these reports. . . Prior to submission to EPA, we assure that all relevant programs (standards, monitoring and assessment, NPDES, NPS) are in general agreement with the report and sign off on the final submission.”

“Our [State Agency]...is organized in a fashion that allows for better integration within the program areas that are working together to develop these [integrated] reports. Individuals that are working in the data collection and assessment group, data management group, data interpretation and list development, and standards coordinator are within one [organizational unit]. This helps the Agency tremendously in using the resources that we have in-house and developing the processes that allow us to collect the samples, analyze data, develop the list and the reports, and conduct a peer review in a timely manner.”

- *Practicing open communication*

“Our State has made it a priority to establish a great working relationship at all levels (with the Region) that allows us to discuss (any and all) questions and come up with resolutions prior to submittal of these reports. The pre-submission, unofficial dialog has been most productive in making certain that key issues of data and standards interpretation are resolved (as much as they can be) before we formally send out the report for public comment and prior to the ‘official’ submission to EPA.”

- *Effective use of data submission cut-off dates*

“[Our EPA Region has] found that when the State clearly defined a clear (but reasonable [e.g., six to nine months]) cut-off date for data to be considered, two things occurred:

- Data came in much earlier than in past cycles
- The quantity of data increased to some degree compared to past cycles.”

- *Providing up-front delisting documentation*

“Our [EPA] Region has found that when a State provides with their submissions a summary of their de-listings rationale, our review and approval process was much smoother. While this documentation is not required to be submitted with the final IR or 303(d) list, receiving the information at the same time as the list aided the reviewers significantly.”

- *Providing up-front Category 4b documentation*

“Whether it’s for a newly identified impaired waterbody or a previously 303(d) listed waterbody, our [EPA] Region recommends that States submit their documentation supporting Category 4b decisions concurrent with or prior to the State’s final IR or 303(d) list. Receiving the documentation prior to or with the final IR or 303(d) list supports the Region’s ability to review States’ submittals in a timely manner.”

## **2. Continued commitment to support and populate ADB, documenting restoration, and streamlining data review**

In order to achieve nationally consistent reporting of water quality assessment status, EPA will continue to strongly recommend that States use the Integrated Reporting (IR) format and the Assessment Database (ADB), including georeferencing. For the 2008 listing cycle EPA has the goal of universal adoption of the ADB version 2 or compatible electronic format. We will be posting examples of ADB-compatible formats on our website in the near future. Please visit the ADB website (<http://www.epa.gov/waters/adb/docs.htm>) for documentation about the ADB data structure to determine the compatibility of alternative formats.

## **Documenting restoration**

As part of the 2006 IR Guidance, EPA strongly encouraged States to document the status of segments that have been removed from Category 5. In order to provide a complete picture of restoration, EPA is now also asking States to capture the reasons for moving waters in Categories 4a, 4b, and 4c to other categories, as well. Below is the list of reasons for moving waterbodies off of the 303(d) list that will be captured by ADB-compatible data systems and count toward EPA's draft Strategic Plan 2006-2011 proposed restoration measure "L". (Note that to count toward this measure; a waterbody must be placed in Category 1 or 2 for all the pollutants and impairments that were identified in 2002 as not attaining standards.) Although the target and baseline in this measure have not yet been finalized, the draft measure L states that by 2012, EPA will attain water quality standards for all pollutants and impairments in more than 2,250 waterbodies identified in 2002 as not attaining water quality standards. In 2002 (the proposed baseline for this measure), states and tribes identified 37,978 waterbodies that were not meeting water quality standards. (A full description of this draft measure and other water quality watershed sub-objective measures may be found at <http://www.epa.gov/water/waterplan>). We cannot effectively report progress of Clean Water Act programs, including progress in restoring waters, without reporting the following information for waterbodies moving from Category 5, 4a, 4b, or 4c to Category 1 or 2.

1. Water no longer is impaired because of restoration activities – meets water quality standards.
2. New monitoring data show water meets water quality standards; reason for recovery unspecified.
3. Original basis for 303(d) listing is incorrect; water meets water quality standards.
4. Change in water quality standards assessment methodology, water meets water quality standards.
5. Water originally listed as threatened but has continued to meet water quality standards and is no longer considered threatened.
6. Change in water quality standards; data show that water meets new water quality standards.

## **Greater coordination between 303(d) and 305(b) reports needed to achieve integrated reporting and streamline data review**

In order to reduce inconsistencies in 303(d) and 305(b) assessment determinations within Integrated Reports and accompanying electronic data, EPA will continue to encourage States and State staff to carefully coordinate the 303(d) and 305(b) assessment findings such that their integrated or separate reports are consistent with each other and the associated electronic data. EPA has found that the simplest method to congruous 303(d), 305(b), and associated electronic data submissions involves using the ADB to generate the associated reports. States that use the ADB or an ADB-compatible system to submit an Integrated Report can benefit from a streamlined data and Integrated Report review by EPA. For these States, EPA is proposing an optional State data quality certification. Currently, Regional staff simultaneously reviews a State's paper submission (either integrated or separate) and the associated electronic data submission to ensure these are equivalent. Regions often have to consult with the State to resolve any discrepancies. To streamline review, States may opt to certify that their integrated report submission is faithfully represented by their electronic data submission. The State in conjunction with the Region would determine which elements of the electronic data to certify on

a case-by-case basis. For the certification to achieve actual efficiencies, the State should assert that in the case of discrepancies between the two submissions the electronic data submission supersedes the paper submission. EPA can then maintain confidence in the accuracy of the data submitted by the State which will be used to populate EPA's website, national databases, and reports to congress.

### **3. Use of assessment results from State probability surveys to generate statewide summaries**

EPA has developed a new module to the ADB for transmitting the results of probability-based surveys. EPA encourages States to use this module to report the assessment results of their State probability (statistically valid) surveys.

States may use the results of their probability surveys to report the summary results for a particular water resource type and designated use (Individual Designated Use Support Summary (Table 3-6) on page 22 of the 2006 IRG) instead of generating summary results derived from site-specific monitoring. Populating summary tables with information from statistically valid probability surveys reduces the total spatial extent of unassessed waters, thus enabling States to report on all waters of the State. Probability survey results alone are not expected to directly affect the number of water body segments on the 303(d) list. Where probability survey results are unavailable, the site-specific assessments populate the summary information for a water body type and/or designated use support.

EPA will work with States and Territories to ensure that the ADB module for reporting on assessment results from State probability surveys will provide the capability to populate Table 3-6, as appropriate for the 2008 reporting cycle. States should note which approach/approaches they are taking to generate this summary.

### **4. The use of partial approvals/further review pending**

Timely State IR submissions and prompt Regional reviews and final actions on IR decisions are high EPA priorities. To this end, EPA is allowing partial approval of State submissions under certain circumstances. Allowing for the partial approval of State submissions and further review of a small number of waterbodies may encourage States to submit their integrated reports on time despite ongoing discussions about a small subset of water bodies. Further, this approach may also facilitate discussions between EPA and States about these water bodies and encourage the development of a timeframe in which to resolve the issues surrounding those waterbodies.

In collaboration with relevant States, Regions may consider a partial approval within 30 days of the receipt of the State's submission of those segments listed as impaired by the jurisdiction, and defer action on a small set of waters if additional discussion between EPA and the State is expected to resolve the disposition of those waters. EPA's decision memorandum should explain that EPA is deferring final action with respect to the State's decision to not list certain waters and clearly identify the specific waters for which EPA is deferring action. Any updates that result from a final assessment of a waterbody undergoing "further review" should be reported in the annual 305(b) update and reflected in ADB as soon as possible. EPA will continue to identify waterbodies as previously categorized in ADB until the issue is resolved.

## **5. Additional clarification on the use of Category 4b**

EPA regulations recognize that alternative pollution control requirements may obviate the need for a TMDL. Specifically, segments are not required to be included on the Section 303(d) list if “[o]ther pollution control requirements (e.g., best management practices) required by local, State, or Federal authority” are stringent enough to implement applicable water quality standards (WQS) (see 40 CFR 130.7(b)(1)) within a reasonable period of time -- the type of information that may be needed to demonstrate good cause not to include those segments on the list (40 CFR 130.7(b)(6)). These alternatives to TMDLs are commonly referred to as Category 4b waters.

Over the past three listing cycles, EPA has provided additional clarity and flexibility with respect to the use of Category 4b. As a result, use of Category 4b is increasing. Use of Category 4b will likely continue to increase during the 2008 reporting cycle – not only in the number of Category 4b demonstrations, but in the types of alternative controls being proposed. As a result, the challenge faced by States and Regions to review and assess the appropriateness of alternative controls to address impaired waters will continue to grow as well.

To meet this challenge, we strongly encourage each Region to work closely with their State counterparts to ensure that Category 4b demonstrations are adequate to support the decision not to include these impaired waters on the State’s Section 303(d) list. As explained in the 2006 IRG, States should submit their Category 4b demonstrations with their Section 303(d) list or Integrated Report submission and the demonstration should address the following six elements:

1. Identification of segment and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards;
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

EPA will evaluate on a case-by-case basis a State’s decision to exclude certain segment/pollutant combinations from the Section 303(d) list (i.e., Category 5) based on the Category 4b alternative. EPA acknowledges that the level of rigor necessary to support the State’s demonstration will vary depending on the complexity of the impairments and corresponding implementation strategies. Hence, close and early coordination between each Region and State counterparts will promote development and timely review of Category 4b demonstrations that successfully address each of the six elements listed above.

To further assist States with developing Category 4b demonstrations, EPA’s recommended structure and content for a State’s Category 4b demonstration is provided in Attachment 2. The recommended structure is consistent with the six Category 4b elements listed above and the content reiterates EPA’s Category 4b expectations outlined in the 2006 IRG. Use of this recommended format will promote a common organizational structure for Category 4b demonstrations nationally, and achieve the following objectives:

- Assist States with documenting Category 4b demonstrations that are consistent with EPA’s regulations and the 2006 Integrated Report Guidance;
- Facilitate timely reviews of Category 4b demonstrations by EPA;

- Serve as a tool for States to obtain data and information from other Federal, State, and local stakeholders that may support Category 4b demonstrations;
- Promote achievement of water quality standards by facilitating sharing of good examples of Category 4b demonstrations among States; and
- Support development of sufficiently detailed administrative records for State and EPA 303(d) list decisions.

The recommended organization also provides additional clarity on how States should address each of the six elements. For example, the attachment clarifies EPA's expectation that States include information on what makes the controls required or why other types of controls already in place may be sufficient (see *Element #2*). Also, for evaluating point and nonpoint source loadings that when implemented will achieve WQS, the attachment clarifies EPA's expectation that a linkage analysis (i.e., cause-and-effect relationship between a water quality target and sources) be included in the Category 4b demonstration and that a loading capacity may not always be needed (see *Element #2*).

In addition to providing a recommended organization for Category 4b demonstration, EPA would like to reiterate that States have the opportunity to assign impaired waters to Category 4b where controls sufficient to achieve water quality standards in a reasonable period of time are already in place. Specifically, as indicated in the 2006 IRG and Attachment 2, controls relied on for Category 4b demonstrations do not always need to occur pursuant to binding legal authority. States may choose to rely on controls that have already been implemented where there is sufficient certainty that implementation will continue until WQS are achieved and will not be reversed. Because the controls are already in place and achieving progress, EPA may consider such controls to be requirements even if their implementation did not occur pursuant to a specific binding legal authority.

## **6. Greater consideration of the watershed approach when States are developing their lists, priorities, and schedules**

Over the course of the past decade, EPA's Office of Water has increasingly supported the application of a watershed approach as an effective tool for environmental management. The Agency defines the watershed approach as a coordinating framework for environmental management that focuses public and private sector efforts to address the highest priority problems within hydrologically defined geographic areas, taking into consideration both ground and surface water flow. Tools and guidance have been developed for both National Pollutant Discharge Elimination System (NPDES) permitting and watershed planning on how to incorporate the watershed approach framework into their activities. In addition, the Total Maximum Daily Load (TMDL) program within EPA Headquarters is supporting two initiatives associated with the application of the watershed approach, including the development of a practitioners guide to watershed TMDL development and the funding of three pilot projects to demonstrate the pollution reduction and cost efficiencies of the watershed approach to TMDL development.

EPA encourages States to incorporate the watershed approach within their existing water quality programs and priorities and by involving stakeholders early and frequently in the process. For the purposes of an integrated report, relevant activities for incorporating the watershed approach include the following:



- Data collection, solicitation, and analysis;
- Waterbody categorization;
- IR development;
- TMDL schedule development; and
- TMDL prioritization.

Therefore, consistent with current State and federal regulatory requirements and the Integrated Report guidance, Regions should encourage State partners to pursue data collection, data analysis, the identification of impaired waters, and the development of TMDL priorities and schedules that embrace the watershed concept. States should consider all existing and readily available data and information regardless of where in the State the data and information were generated. For additional information about data assembly, see pp. 30-32 of the 2006 IRG.

In addition, the draft watershed measure “W” of the EPA Strategic Plan proposes to track watershed-based water quality improvements, which encourages the documentation of watershed-related successes. Measure W, as currently proposed, states that by 2012, EPA will improve water quality conditions in 213 impaired (12-digit) watersheds nationwide using the watershed approach. The proposed baseline for this measure is 2002; in this year, zero watersheds were improved of an estimated 40,000 to 50,000 impaired watersheds with one or more impaired waterbodies. For the purposes of this measure, “improved” means: (1) one or more of the impairment causes identified in 2002 are removed for at least 40 percent of the impaired waterbodies or impaired miles/ acres; or (2) there is significant watershed-wide improvement—as demonstrated by valid scientific information—in one or more water quality parameters or related indicators associated with the impairments. (A full description of this draft measure and other water quality/watershed subjective measures may be found at <http://www.epa.gov/water/waterplan>.)

For more information about the watershed approach tools mentioned above, see the 2003 *Watershed-Based National Pollutant Discharge Elimination System (NPDES) Permitting Implementation Guidance* (available via [http://www.epa.gov/npdes/pubs/watershedpermitting\\_finalguidance.pdf](http://www.epa.gov/npdes/pubs/watershedpermitting_finalguidance.pdf)) and the 2005 *Draft Handbook for Developing Watershed Plans to Restore and Protect Our Waters* (available via [http://www.epa.gov/owow/nps/watershed\\_handbook/](http://www.epa.gov/owow/nps/watershed_handbook/)). Additional information about the watershed approach is available via EPA’s watersheds website at <http://www.epa.gov/owow/watershed/index2.html>.)

## **7. Continuing improvements in State monitoring and assessment programs**

States and Territories have developed and are now implementing comprehensive monitoring strategies, as set out in EPA’s “Elements of a State Water Monitoring and Assessment Program” (March 2003, <http://www.epa.gov/owow/monitoring/elements/>). Congress appropriated \$18.5 million as a separate portion of the total Section 106 funds for a Monitoring Initiative, to be used for enhancements to State and Territorial monitoring programs consistent with their monitoring strategies, and for collaboration on statistically valid surveys of the nation’s waters. Monitoring enhancements may include efforts to implement State or watershed-scale surveys, develop new water quality criteria, strengthen data analysis/assessment methods and improve data

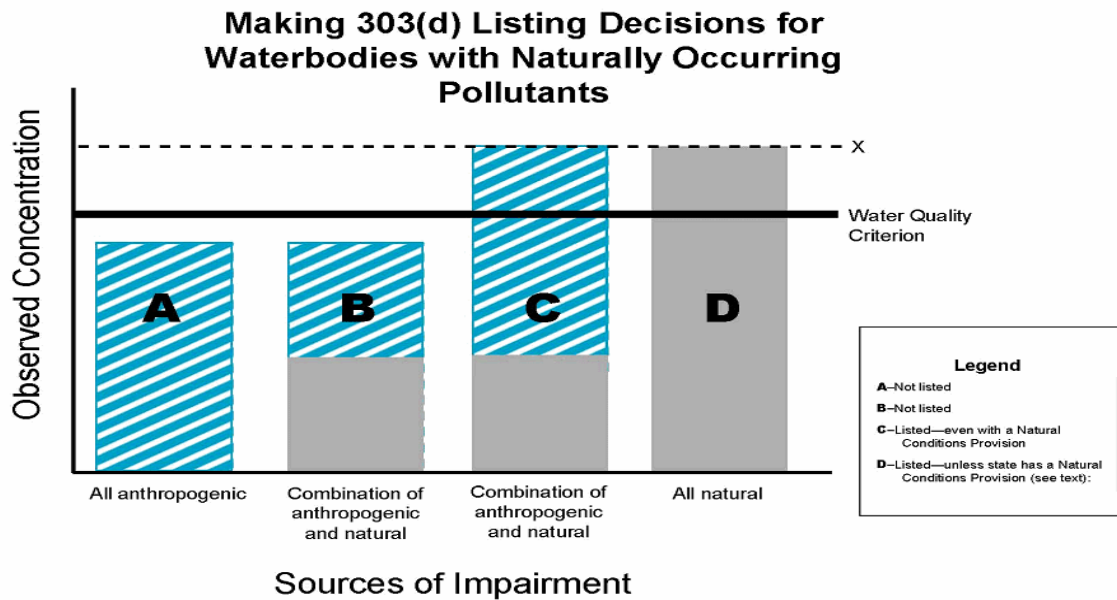
management and reporting. For more details, see “Guidelines for Clean Water Act Section 106 Monitoring Initiative Funds” at [http://www.epa.gov/owow/monitoring/guidelines\\_intiative.html](http://www.epa.gov/owow/monitoring/guidelines_intiative.html).

## **8. How should States make 303(d) listing decisions when naturally occurring pollutants are present in a waterbody?**

Several States have requested that EPA clarify how to make a 303(d) listing decision for waterbody segments with natural background levels of a pollutant. In particular, States have requested guidance on assessing waterbodies where the source of the pollutant causing or contributing to an impairment is either naturally occurring (i.e., part of the “natural background” of the waterbody) or from a combination of naturally occurring and other sources. Ultimately, the State’s water quality standards are the basis for determining whether a waterbody is impaired by a pollutant and therefore included on the State’s section 303(d) list (Category 5). States may have a general provision in their water quality standards specifying that the applicable aquatic life water quality criterion will be equal to the natural background level of a pollutant if it is determined that the natural background level is less stringent than the otherwise applicable criteria. Therefore, when making 303(d) listing decisions, the determination as to what constitutes natural background conditions should be based on how that term is defined by the State in its water quality standards. Natural background provisions in State water quality standards are not appropriate for human health criteria. For questions about establishing water quality criteria for aquatic life equal to natural background levels, please see EPA’s memorandum, “Establishing Site Specific Aquatic Life Criteria Equal to Natural Background”, available at <http://www.epa.gov/waterscience/library/wqcriteria/naturalback.pdf>.

In the absence of a natural background provision in a State’s water quality standards regulation, or site-specific criteria based on natural background, the otherwise applicable criteria would be the basis for determining whether a waterbody is impaired. In such circumstances, when a criterion is not achieved in a waterbody, EPA would generally expect the State to include that waterbody on its 303(d) list.

To illustrate this recommended approach to 303(d) decision making *for waters impaired totally or in part* by a naturally occurring pollutant, a number of theoretical scenarios are illustrated in the Figure 1, and discussed in the text below. The Figure assumes a water quality standards provision similar to: "When natural background conditions exceed any applicable *aquatic life* water quality criteria ... the applicable water quality criteria shall not apply, instead, pollutant levels shall not exceed the natural background conditions..." These examples do not address all possible scenarios or variations in State specific water quality standards.



**Figure 1**

**Column A** – The waterbody receives only anthropogenic pollutant loadings. The waterbody does not have to be included on the 303(d) list or placed into Category 5 because the applicable numeric criterion is not exceeded.

**Column B** – The waterbody receives pollutant loadings from both natural background and anthropogenic sources, but because the applicable numeric criterion is not exceeded, the waterbody does not have to be included on the 303(d) list or placed into Category 5.

**Column C** - The waterbody receives pollutant loadings from both natural background and anthropogenic sources. The applicable numeric criterion is exceeded, and therefore, the waterbody is considered impaired and belongs the 303(d) list or Category 5.

**Column D** - The waterbody receives pollutant loadings from only natural background sources, and the applicable numeric criterion is exceeded. The waterbody is considered impaired and belongs on the 303(d) list or Category 5 unless the State’s water quality standards include a natural conditions provision consistent with the standards provision quoted above.

**9. Further information on how to address listing of waters impaired by mercury**

In collaboration with the States, EPA is considering a voluntary approach to listing waters impaired by mercury from atmospheric sources under CWA section 303(d). The approach would acknowledge the complexities involved in addressing waters impaired due to atmospheric mercury deposition, encourage and recognize States that are addressing their mercury sources

through State programs, and achieve early environmental results (e.g., by focusing more resources earlier on implementation of pollutant controls). Under the voluntary approach, EPA is considering that where a State has in place a comprehensive mercury program, it may be appropriate for the State to put waters that are impaired primarily by atmospheric mercury in a listing subcategory “5m” and place development of mercury TMDLs for these waters late in the State’s TMDL development schedule. Note that, as recognized in previous IR guidance, States may separate their impaired waters within their own State-defined subcategories.

EPA, in collaboration with the States, would identify elements of the voluntary approach, such as: having a comprehensive mercury program *in place*; demonstrating that it has begun to make some progress in reducing the mercury loadings over which it has control; identifying those waterbodies in the State impaired primarily by atmospheric mercury deposition and the potential emission sources contributing to that deposition; identifying regulatory and non-regulatory controls; and describing monitoring, reporting efforts, and implementation schedules.

Nothing in such an approach would be meant to imply that EPA believes it is inappropriate for States to put mercury TMDLs in their schedules sooner rather than later. Nor would use of the “5m” approach remove the obligation to develop TMDLs for mercury-impaired waters if such mercury reduction programs do not result in attainment of water quality standards. TMDLs continue to be valuable tools for States to identify and quantify the sources of mercury to a waterbody, including air deposition, and to determine specifically what reductions are needed to meet water quality standards. EPA recognizes that some States are currently exploring alternative and innovative approaches to mercury TMDLs.

EPA is currently working with the States and Regional offices to further develop the proposed “5m” listing approach, and EPA expects to issue a separate clarification memo. EPA will continue to assist all States in their efforts to attain water quality standards and will work with States to provide additional information on approaches to developing mercury TMDLs in the coming months.

## ATTACHMENT 1

### 2006 IR CLARIFICATION MEMORANDUM

#### MEMORANDUM

**Date:** March 31, 2006

**Subject:** Additional Information Concerning 2006 State and Territory Clean Water Act (CWA) Section 303(d) and/or Integrated Reporting and Listing Decisions

**From:** John Goodin, Chief  
Watershed Branch  
Assessment and Watershed Protection Division  
Office of Wetlands, Oceans and Watersheds

**To:** CWA Section 303(d) Program Coordinators, Regions I-X

What follows is some additional information on how to address certain operational issues that may arise with the development and review of water quality reports consistent with the *Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act (IRG)*. We are also requesting your assistance in developing some useful information for States and EPA that will facilitate the timely development and submission of the 2008 reports-- information we intend to analyze with you and distribute this summer.

The discussion below does not change any provisions of the 2006 IRG, but should help to clarify a number of operational issues that will assist in timely review and approval of this and future integrated reports. I appreciate the specific efforts of several Regions who brought these issues to our attention and helped in formulating this response. Thank you all for your continued hard work and dedication. If you have any questions or comments that would help shape additional clarifications, please call me or Michael Haire at 202-566-1224. Additionally, you may contact your Watershed Branch Regional Liaisons (see below).

#### 1. Identify Issues that Delay 2006 Submissions

Beginning with the 2002 Integrated Report Guidance, EPA has recommended that states develop and submit an integrated water quality report that meets the requirements of both Section 305(b) and 303(d) of the Clean Water Act. This reporting format may have led to states instituting new policies and procedures in order to conduct data and information solicitation, data compilation, data analysis, report development, public review and comment, and submission of their report to EPA. Changes to state water quality standards and revisions to assessment methodologies to be more consistent with the IR Guidance documents developed in 2002 and 2004 may have also presented challenges to meeting April 1 deadlines. Based upon your current knowledge of your state programs, we ask each Region by the end of April to work with your headquarters regional Liaisons to:

- project a date for receipt of the 2006 submission,

- List the format each jurisdiction proposes to use (e.g., IR, separate 305(b) and 303(d)), and
- identify as soon as possible any other state specific issues that might result in late submissions for 2006 and 2008 lists.

We are particularly interested in identifying what measures can be initiated regionally and nationally to ensure that all States provide their 2008 reports by April 1 of that year.

## **2. Consider the Use of Partial Approvals/Further Review Pending**

To expedite an EPA approval action for those situations where both EPA and the State concur on the status of the vast majority of waterbody segments, and the Region expects there may be lengthy discussions with the State to resolve the disposition of a small set of waters, the Region may consider a partial approval within 30 days of the receipt of the State's submission of those segments listed as impaired by the jurisdiction. The decision memo should explain that EPA is deferring final action with respect to the State's decision to not list certain waters and clearly identify the specific waters for which EPA is deferring action. Some Regions have taken this approach in the past and have found that it facilitates more timely availability of data, as well as resolution of the status of waters in question.

## **3. Documenting Delisting Decisions**

We strongly suggest that Regions encourage states to document, at or before the time of final list submission, the status of those segments included on the 2004 (and previous) 303(d) lists (segments placed in Category 5). As discussed in the 2006 IR Guidance, the fact that a segment was previously included in Category 5 (or on the 303(d) list) does not necessarily mean that it must remain in Category 5 until a TMDL is established. In many cases, removing a segment from Category 5 prior to TMDL development may be warranted, but the justification for doing so should be documented.

Consistent with current regulation (40 CFR 130.7(b)(6)(iv)), EPA has the prerogative to request after the formal 2006 submission has been received that the state demonstrate good cause for not including individual segments (including previously listed segments) on their 303(d) list (Category 5). EPA may request this demonstration, for example, if the state does not develop an adequate record supporting the basis for the decision or specifically explain its decision to move segments previously listed in Category 5 to other categories. However, states should consider in the interest of fostering timely EPA action on state list submissions, providing this information along with the final 303(d) list submission.

To provide the Regional 303(d) coordinators with a more complete understanding of the changes that may have occurred from one IR cycle (or 303(d) submission) to the next, and to help expedite EPA's review and approval/disapproval action for those segments in Category 5, we recommend that you encourage states to submit with their IR (or their 303(d) list) a table documenting changes in segment placement or categorization from the 2004 IR, and a brief summary of why these changes occurred. As described in the 2006 IR Guidance in Section 5, Table 5-2 of the IRG provides an example of how states might do this.

## Documentation of “Good Cause” to Move Segments from Category 5.

Impaired Segment (2004)	Placement in 2006	Explanation for change
Segment 214	Category 4a	TMDL completed and approved by EPA for Chromium.
Segment 266	Category 4c	The analysis of new data concluded that the aquatic life use impairment is solely due to low river flow
Segment 321	Category 4b	The jurisdiction has proposed an alternative approach to attain WQS by implementing required controls via NPDES permits.
Segment 349	Category 1	The assessment of new data documents that applicable WQS are now being attained.
Segment 350	Category 3	Previous listing in Category 5 was inconsistent with assessment methodology. Available data insufficient to determine attainment status

To improve our ability to track these changes, EPA Regional staff will now include a brief explanation for any segments listed in Category 5 in 2004 that are not listed in 2006 in the National TMDL Tracking System. A hypothetical set of explanations for removal from Category 5 is provided in Table 3 (see attached). This list differs somewhat from the choices currently available in NTTTS and ADB regarding "reasons for delisting." We expect to have the list of options finalized shortly, in consultation with you and the states.

### **4. Provide Clarification to States on Factors to Consider When Evaluating the Use of Category 4b**

Over the past three listing cycles, EPA has provided additional clarity and flexibility with respect to the use of Category 4b. As a result, use of Category 4b is gradually gaining momentum. For example, the Regions concurred with over 100 waters assigned to Category 4b by states during the 2004 reporting cycle. Also, a variety of alternative controls and programs are being relied on to support these Category 4b assignments (e.g., CWA Section 319 projects, Remedial Action Plans, Forest Service Aquatic Restoration Plans).

Use of Category 4b will likely continue to gain momentum during the 2006 reporting cycle – not only in the number of Category 4b demonstrations, but the types of alternative controls being proposed. As a result, the challenge faced by states and Regions to review and assess the appropriateness of alternative controls to address impaired waters will continue to grow as well. To meet this challenge, we strongly encourage each Region to work closely with your state counterparts to ensure that Category 4b demonstrations are consistent with EPA’s expectations in the 2006 IRG (See *Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act – Section V Part G Subcategory 2a*). Close coordination will promote development and timely review of Category 4b demonstrations that successfully address each expectation outlined in the 2006 IRG. To that end, you should encourage that states that propose to use the 4b approach for addressing impaired segments provide with their 2006 submission either the actual documentation of their decision rationale for placing these segments into Category 4b, or a summary of that decision rationale. For those states that choose to provide a summary of their decision rationale, they

could use a tabular summary format similar to the “good cause” documentation discussed in above. Regions should maintain this documentation or summary as part of the Region’s record of its decision to approve the state’s 303(d) list in the event that EPA’s approval decision is challenged.

To further assist Regions in coordinating with their states on Category 4b demonstrations, the Watershed Branch is developing recommendations on format and structure for Category 4b demonstrations. Please note, these recommendations will not revise Category 4b expectations outlined in the 2006 IRG. Rather, the recommendations are intended to promote a common organizational structure for states’ Category 4b demonstrations and assist states with addressing each Category 4b expectation outlined in the 2006 IRG.

## **5. Improved Process for Integrated Report Data Management**

Finally, EPA is under increasing pressure to report the status of water quality to Congress and the public in a more timely fashion. Efficient data management of water quality assessment decisions is vital to water program activities as well as measuring progress for EPA's Strategic Plan.

In order to ensure that expedient data management practices occur as a part of the 2006 submission cycle we have outlined some of the key steps that states, Regions and Headquarters should follow to allow for quick processing of high quality data into our national data systems. In the attached document is an Ideal Data Flow diagram that depicts the major stages of the Integrated Report data flow process. The main departure from current data management practice occurs in the timing of the data submission to headquarters and subsequent data review by Regions. Regions should simultaneously review a state's Integrated Report submission and the associated data files for their list. Upon the Region's final action on/partial approval of a state's 303(d) list, the Regions should forward the approved data files to headquarters for processing into the national data systems. Headquarters will then provide the regions with a review site where the Regions will need to perform a quality check on the uploaded data.

By following this process, we can manage the data with better confidence and expedite the time frame for data availability. This data flow can be most expedient for states that submit their data via the newest versions of the ADB, which is compatible with the National Assessment Database and NTTS. States should therefore continue to be strongly encouraged utilize ADB for their data submissions. We plan to use the attached spreadsheet titled "2006 Submissions" as a means of tracking the Integrated Report process from report submission to publication of the information on EPA websites. Regions should coordinate with their Headquarters regional liaison and relevant monitoring coordinators for their region when updating this spreadsheet.



## Headquarters Regional Liaisons

<b>EPA Region</b>	<b>Headquarters Liaison</b>	<b>Liaison Phone Number</b>	<b>Liaison email address</b>
1	Sarah Furtak	202-566-1167	<a href="mailto:Furtak.sarah@epa.gov">Furtak.sarah@epa.gov</a>
2	Chris Lewicki	202-566-1293	<a href="mailto:Lewicki.chris@epa.gov">Lewicki.chris@epa.gov</a>
3	Mike Haire (Liaison coordinator)	202-566-1224	<a href="mailto:Haire.michael@epa.gov">Haire.michael@epa.gov</a>
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10	Eric Monschein	202-566-1547	<a href="mailto:Monschein.eric@epa.gov">Monschein.eric@epa.gov</a>

## ATTACHMENT 2

### RECOMMENDED STRUCTURE FOR CATEGORY 4B DEMONSTRATIONS

The purpose of this Attachment is to provide States a recommended structure for addressing EPA's expectations in the 2006 IRG for Category 4b demonstrations. Specifically, States should address the following six elements in their Category 4b demonstrations:

1. Identification of segment and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards;
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

Additional details for each of the six elements are provided below.

States should submit their Category 4b demonstrations that address each of the six elements with their Section 303(d) list or Integrated Report submission. In general, the State's 4b demonstration should be submitted as a stand-alone document. In situations where data and information for a Category 4b demonstration are contained in existing documents developed under separate programs (e.g., NPDES permit, Superfund Record of Decision), the State should summarize relevant information in the Category 4b demonstration and reference the appropriate supporting documentation that provides that information. The supporting documentation should be included as part of the State's administrative record supporting the Category 4b determination.

#### **1. Identification of Segment and Statement of Problem Causing Impairment**

##### ***Segment Description***

The demonstration should identify the impaired segment, including name, general location in the State, and State-specific location identifier. Also, the segment should be identified/georeferenced using the National Hydrography Dataset (NHD). The assessment information should be transmitted electronically through the Assessment Database (ADB).

##### ***Impairment and pollutant causing impairment***

The demonstration should identify the applicable water quality standard(s) not supported for each segment and associated pollutant causing the impairment.

##### ***Sources of pollutant causing impairment***

The demonstration should include a description of the known and likely point, nonpoint, and background (upstream inputs) sources of the pollutant causing the impairment, including the magnitude and locations of the sources. In cases where some portion of the impairment may result from naturally occurring sources (natural background), the demonstration should include a description of the naturally occurring sources of the pollutant to the impaired segment.

## **2. Description of Pollution Controls and How They Will Achieve Water Quality Standards**

### ***Water quality target***

The demonstration should identify a numeric water quality target(s) – a quantitative value used to measure whether or not the applicable water quality standard is attained. Generally, the pollutant of concern and the numeric water quality target are, respectively, the chemical causing the impairment and the numeric criteria for that chemical contained in the water quality standard. The demonstration should express the relationship between any necessary reduction of the pollutant of concern and the attainment of the numeric water quality target.

Occasionally, the pollutant of concern is different from the pollutant that is the subject of the numeric water quality target (e.g., when the pollutant of concern is phosphorous and the numeric water quality target is expressed as dissolved oxygen (DO) criteria). In such cases, the Category 4b demonstration should explain the linkage between the pollutant of concern and the chosen numeric water quality target. In other cases, multiple indicators and associated numeric target values may be needed to interpret an individual water quality standard (e.g., multiple fish habitat indicators to interpret acceptable sediment levels).

In cases where the impairment is based on non-attainment of a narrative (non-numeric) water quality criterion, the Category 4b demonstration should identify one or more appropriate numeric water quality target levels that will be used to evaluate attainment of the narrative water quality criteria. The Category 4b demonstration should also describe the basis for selecting the numeric target levels.

### ***Point and nonpoint source loadings that when implemented will achieve WQS***

The demonstration should describe the cause-and-effect relationship between the water quality standard (and numeric water quality target as discussed above) and the identified pollutant sources and, based on this linkage, identify what loadings are acceptable to achieve the water quality standard. The cause-and-effect relationship may be used to determine the loading capacity of the waterbody for the pollutant of concern. However, a loading capacity may not be relevant in all circumstances. For example, a loading capacity would not be relevant in situations where the pollutant source will be completely removed. The demonstration should identify the loading capacity of the segment for the applicable pollutant or describe why determination of the loading capacity is not relevant to ensure that the controls are sufficient to meet applicable water quality standards.

The demonstration should also contain or reference documentation supporting the analysis, including the basis for any assumptions; a discussion of strengths and weaknesses in the analytical process; and results from any water quality modeling or data analysis.

### ***Controls that will achieve WQS***

The demonstration should describe the controls already in place, or scheduled for implementation, that will result in reductions of pollutant loadings to a level that achieves the numeric water quality standard. The demonstration should also describe the basis upon which the State concludes that the controls will result in the necessary reductions.

### ***Description of requirements under which pollution controls will be implemented***

The demonstration should describe the basis for concluding that the pollution controls are requirements or why other types of controls already in place may be sufficient, as discussed below.

As discussed in the 2006 IR guidance, EPA will consider a number of factors in evaluating whether a particular set of pollution controls are in fact “requirements” as specified in EPA’s regulations, including: (1) authority (local, State, Federal) under which the controls are required and will be implemented with respect to sources contributing to the water quality impairment (examples may include: self-executing State or local regulations, permits, and contracts and grant/funding agreements that require implementation of necessary controls); (2) existing commitments made by the sources to implement the controls (including an analysis of the amount of actual implementation that has already occurred); (3) availability of dedicated funding for the implementation of the controls; and (4) other relevant factors as determined by EPA depending on case-specific circumstances.

Since the overriding objective of the 4b alternative is to promote implementation activities designed to achieve water quality standards in a reasonable period of time, for all of the factors listed above, EPA will evaluate each 4b alternative on a case-by-case basis, including in particular the existence of identifiable consequences for the failure to implement the proposed pollution controls. Depending on the specific situation, “other pollution control requirements” may be requirements other than those based on statutory or regulatory provisions, as long as some combination of the factors listed above are present and will lead to achievement of WQS within a reasonable period of time. For example, established plans of government agencies that require attainment of WQS within a reasonable period of time may qualify even when their components include incentive-based actions by private parties. States may also choose to rely on controls that have already been implemented where there is sufficient certainty that implementation will continue until WQS are achieved and will not be reversed. Because the controls are already in place and achieving progress, EPA may consider such controls to be requirements even if their implementation did not occur pursuant to binding legal authority.

### **3. Estimate or Projection of Time When WQS Will Be Met**

EPA expects that segments impaired by a pollutant but not listed under Section 303(d) based on the implementation of existing control requirements will attain WQS within a reasonable period of time. The demonstration should provide a time estimate by which the controls will result in WQS attainment, including an explanation of the basis for the conclusion.

The demonstration should also describe why the time estimate for the controls to achieve WQS is reasonable. EPA will evaluate on a case-specific basis whether the estimated time for WQS attainment is reasonable. What constitutes a “reasonable time” will vary depending on factors such as the initial severity of the impairment, the cause of the impairment (e.g., point source discharges, in place sediment fluxes, atmospheric deposition, nonpoint source runoff), riparian condition, channel condition, the nature and behavior of the specific pollutant (e.g., conservative, reactive), the size and complexity of the segment (e.g., a simple first-order stream, a large thermally stratified lake, a density-stratified estuary, and tidally influenced coastal segment), the nature of the control action, cost, public interest, etc.

#### **4. Schedule for Implementing Pollution Controls**

The demonstration should describe, as appropriate, the schedule by which the pollution controls will be implemented and/or which controls are already in place.

#### **5. Monitoring Plan to Track Effectiveness of Pollution Controls**

The demonstration should include a description of, and schedule for, monitoring milestones to track effectiveness of the pollution controls. The demonstration should describe water quality monitoring that will be performed to determine the combined effectiveness of the pollution controls on ambient water quality. If additional monitoring will be conducted to evaluate the effectiveness of individual pollution controls, EPA encourages States to include a description of these efforts as well. The demonstration should identify how and when assessment results from the monitoring will be reported to the public and EPA.

#### **6. Commitment to Revise Pollution Controls, as Necessary**

The demonstration should provide a statement that the State commits to revising the pollution controls, as necessary, if progress towards meeting water quality standards is not being shown. Also, the demonstration should identify how any changes to the pollution controls, and any other element of the original demonstration, will be reported to the public and EPA.