



United States General Accounting Office  
Washington, DC 20548

Resources, Community, and  
Economic Development Division

B-285593

June 21, 2000

The Honorable Bud Shuster  
Chairman, Committee on Transportation  
and Infrastructure  
House of Representatives

Subject: Clean Water Act: Proposed Revisions to EPA Regulations to Clean Up  
Polluted Waters

Dear Mr. Chairman:

This report responds to your request that we assess economic and compliance issues associated with two recently proposed rulemakings by the Environmental Protection Agency (EPA). The first proposed rule would revise the total maximum daily load (TMDL) program, which is authorized by the Clean Water Act. The TMDL program is intended to ensure that the nation's waters are of sufficient quality for the protection and propagation of fish, shellfish, and wildlife, and for recreation in and on U.S. waters. TMDLs are used to restore water quality by identifying how much pollution a body of water can receive and still meet its standards. The amount of pollution entering the water is then reduced to that level. The proposed revisions add requirements to clarify and strengthen how TMDLs are established, and to provide added assurance that plans for cleaning up waters are implemented.

The second proposed rule would revise EPA's National Pollutant Discharge Elimination System (NPDES) program that controls the discharge of pollutants from "point" sources of pollution (i.e., entities such as industrial facilities and municipal wastewater treatment plants that discharge pollutants through a discrete point such as a pipe). The revisions would expand EPA's authority to issue permits in certain circumstances and would require new large or expanding dischargers to obtain from other dischargers a certain level of reductions in pollutants being released to a polluted water before they begin discharging to that water. In addition, the revisions would allow, under certain circumstances, the use of point source discharge permits to control pollution from a number of agricultural and silvicultural activities that have generally been treated as "nonpoint" sources. These revisions are intended to help states and EPA in developing and implementing TMDLs, and hence were issued at the same time as the proposed TMDL regulation. States are primarily responsible for

implementing the TMDL, NPDES, and other Clean Water Act programs. EPA issues policy and guidance for these programs and implements them when a state fails to do so or is not delegated program authority.

TMDLs were first required by the Clean Water Act in 1972 but were the subject of little attention by EPA and the states in subsequent years. For its part, EPA first issued regulations governing states' development of TMDLs in 1985 but did little to enforce them. In recent years, lawsuits alleging inaction by EPA and the states have spurred increased attention to the development of TMDLs by imposing judicial deadlines on some states. As stated in EPA's proposed regulations, the revisions to the TMDL and NPDES regulations "revise, clarify, and strengthen" current regulatory requirements for these programs.

Certain statutes governing federal rulemaking activities generally require EPA to evaluate the economic impacts of proposed regulations. If a preliminary economic analysis indicates that certain thresholds of costs have been met, additional detailed economic analyses are required. The Office of Management and Budget (OMB) has issued a "Best Practices" document, and EPA has guidance for conducting such economic analyses. The Regulatory Flexibility Act requires an agency to prepare an "initial regulatory flexibility analysis" if it determines that a proposed regulation will have "a significant economic impact on a substantial number of small entities."<sup>1</sup> In addition, if on the basis of a preliminary analysis, an agency determines that a proposed regulation includes a federal mandate that may result in expenditure of \$100 million or more by state, local, and tribal governments in the aggregate, or by the private sector, in any one year, the Unfunded Mandates Reform Act of 1995 requires more detailed analyses of costs, benefits, and alternatives. A similar directive is imposed on agencies by Executive Order 12866.

On the basis of its economic analyses, EPA concluded that neither proposed regulation would result in expenditures by governments and the private sector in excess of \$100 million in any one year and, therefore, did not conduct more detailed analyses under the Unfunded Mandates Reform Act. With respect to the Regulatory Flexibility Act, EPA determined that because neither proposed regulation directly regulates small entities, neither would have a significant economic impact on a substantial number of small entities.

As requested, this report assesses (1) the reasonableness of EPA's economic analyses for the two proposed regulations and (2) whether EPA's determinations under the Unfunded Mandates Reform Act of 1995 and the Regulatory Flexibility Act were adequately supported. The report summarizes the information provided to your staff during our briefing on June 21, 2000, and formally transmits the charts (which provide more detail) presented during that briefing (see enc. I).

To prepare the information in this report, we reviewed EPA's proposed regulations on Water Quality Planning and Management and the National Pollutant Discharge

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<sup>1</sup>Small entities generally include small businesses, small nonprofit enterprises, and small governmental jurisdictions.

Elimination System and Antidegradation Policy and associated economic analyses. We used standard economic principles as criteria to assess the reasonableness of the methodology and key economic assumptions that EPA used in its economic analyses. We also reviewed the extent to which the methodology and key assumptions were consistent with OMB's "Best Practices" and EPA's guidance on conducting economic analyses. In addition, we reviewed public and industry comments on the proposed regulations and EPA's economic analyses. To assess the agency's compliance with the Unfunded Mandates Reform Act of 1995 and the Regulatory Flexibility Act, we reviewed the statutes and their legislative history and case law. We interviewed officials responsible for the analyses in EPA, agency attorneys, and officials involved in EPA's final cost analyses. We also interviewed officials with OMB's Office of Information and Regulatory Affairs, cognizant officials at the U.S. Department of Agriculture, and other interested parties.

In summary, we found limitations with EPA's economic analyses of the proposed regulations for the TMDL and NPDES programs that raise questions about their reasonableness and about the determinations that EPA has based on them. Of particular consequence, the outcomes of the analyses were heavily influenced by a number of key assumptions. In the case of the TMDL program, for example, the agency assumed that states are essentially in full compliance with current regulations, or will be as a result of existing statutory and regulatory requirements. Therefore, EPA estimated only the costs that would result from the new requirements in the proposed regulations. However, compliance with existing TMDL regulations has been problematic, and future compliance in the absence of the proposed regulation is uncertain. We found similar uncertainties with key "baseline" assumptions that affect the cost estimates associated with the proposed NPDES regulation. For example, EPA assumed that 30 states have, or will have, adequate enforceable authorities over silviculture, and that these states would therefore incur no costs as a result of the regulation. However, EPA's proposed regulation did not specify the types of controls that would be adequate to control silvicultural sources of pollution. Without such information, state foresters and forestry experts expressed concern to us that costs could be incurred as a result of additional control requirements. In addition, the key water quality data available to EPA to identify the number of waters not meeting standards and the number of TMDLs that will be needed are incomplete, inconsistently collected by states, and sometimes based on outdated and unconfirmed sources.<sup>2</sup> As a result of these limitations, EPA's cost estimates are subject to substantial uncertainty. Under these circumstances, it would have been appropriate for EPA to assess the effect of different assumptions on the agency's cost estimates. Finally, EPA provided little information on the benefits associated with the proposed regulations. While EPA's proposed regulation may well have benefits, without information on both costs and benefits, it is difficult to confirm that the regulation is economically justified.

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<sup>2</sup>For example, in 1996 (the most recent national data available), states assessed only 6 percent of ocean shoreline; 19 percent of rivers and streams; 40 percent of lakes, ponds, and reservoirs; and 72 percent of estuaries.

Given the uncertainties surrounding EPA's cost estimates, we disagree with EPA that the agency's analyses adequately supported its determinations under the Unfunded Mandates Reform Act of 1995 that more detailed analyses of costs, benefits, and alternatives were not needed for either of the proposed regulations. However, in the case of the requirements for additional analyses under the Regulatory Flexibility Act, case law supports EPA's determination that because its proposed revisions to both regulations do not *directly* regulate small entities, additional analyses were not required. Specifically, several court decisions have ruled in analogous situations that agencies' regulations were not subject to the Regulatory Flexibility Act's requirements for additional analysis. For example, one case addressed regulations under the Clean Air Act dealing with national ambient air quality standards. The court ruled that EPA's action establishing the standards did not directly regulate small entities; instead the costs to small entities would be imposed in the future by discretionary state actions implementing the standards. The principle set forth in this and other cases is applicable to the TMDL proposed regulation because the TMDL proposed regulation does not itself regulate small entities and any costs incurred by small entities in the future will be imposed by future discretionary state action implementing the regulations. Similarly, courts have held that where a proposed regulation does not impose any regulatory requirements at all on any entities, but instead expands agency authority to take future discretionary action, no initial regulatory flexibility analysis is required. Such is the case with the NPDES proposed regulation.

### **Agency Comments**

We provided a draft of this report to EPA and OMB for their review and comment. The Branch Chief for Natural Resources in OMB's Office of Information and Regulatory Affairs provided oral comments, and characterized them as minor and editorial in nature. These comments have been incorporated throughout the report as appropriate. EPA's June 16, 2000, letter agreed with our conclusions about the agency's compliance with the requirements of the Regulatory Flexibility Act, but expressed a number of concerns with other matters discussed in the draft report.

Among its key points, EPA said we inappropriately faulted the assumptions used by the agency in preparing its analysis, particularly as it relates to EPA's key "baseline" assumption that states are essentially in full compliance with current regulations, or will be as a result of existing statutory and regulatory requirements. EPA maintains that its assumption of full compliance was appropriate and consistent with OMB and EPA guidance. Our disagreement with EPA is not whether the agency was permitted under guidance to assume full compliance but rather that this key assumption was not accompanied by alternative--and potentially more realistic--assumptions about future compliance. Both EPA's guidance and OMB's 1996 "Best Practices" recognize that full compliance is often not a reality and that the degree of compliance with existing regulations can significantly affect the results of a cost analysis. We continue to believe that analyses of alternative compliance rates were needed and that such analyses would likely have indicated a range of possible costs exceeding those estimated by EPA. We also continue to believe that in the absence of such analyses, EPA cannot conclude with reasonable assurance that the annual costs of

each proposed regulation would not exceed the \$100 million threshold set forth in the Unfunded Mandates Reform Act.

As a related matter, EPA also said that in addressing uncertainties about information central to its analyses, particularly water quality data, it complied with OMB's "Best Practices" that under such circumstances, ". . . each agency shall base its decisions on the best reasonably obtainable information." However, we believe that EPA used a narrow set of assumptions that do not sufficiently take into account the extent of these uncertainties and their potential effect on the outcome of its analyses. An appropriate course of action would have been to assess alternative assumptions about these factors. Such an approach would have presented a more realistic picture of the range of potential costs.

EPA's comments and our point-by-point responses are provided in enclosure II.

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As requested, this report will not be distributed until 7 days after its issuance date unless you publicly announce its contents earlier. At that time, we will send copies of this report to the Honorable Carol M. Browner, EPA Administrator; the Honorable Jacob J. Lew, OMB Director; and other interested parties. We will make copies available to others on request.

Please contact me at (202) 512-6111 if you or your staff have any questions. Key contributors to this report were Chuck Bausell, Hal Brumm, Steve Elstein, Tim Guinane, Karen Keegan, and Trish McClure.

Sincerely yours,

Peter F. Guerrero  
Director, Environmental Protection Issues

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Briefing to the House Transportation  
and Infrastructure Committee

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**Review of Two EPA Proposed Regulations Regarding  
Water Quality Management**

**June 21, 2000**

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**Review Objectives**

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- Assess the reasonableness of EPA's economic analyses of its proposed revisions to regulations on Water Quality Planning and Management (the "TMDL regulation") and the National Pollutant Discharge Elimination System Program and Federal Antidegradation Policy (the "NPDES regulation").
  - Assess whether EPA's determinations that it was not required to conduct further analyses under the Regulatory Flexibility Act (Reg. Flex.) and the Unfunded Mandates Reform Act of 1995 (UMRA) are adequately supported.
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To meet our review objectives, we

- reviewed documents supporting EPA’s economic analyses for the two proposed revisions, and public and industry comments on the rules and EPA’s analyses;
  - applied standard economic principles and Office of Management and Budget (OMB) Best Practices and EPA guidance on how to prepare economic analyses;
  - analyzed statutory language, legislative history, and case law regarding Reg. Flex. and UMRA; and
  - interviewed officials from EPA, OMB, the U.S. Department of Agriculture, and other interested parties.
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- The Clean Water Act includes provisions for addressing both point and nonpoint sources of pollution.
  - The control of point sources is done through a regulatory program known as NPDES that requires issuing permits to entities that discharge pollutants directly to surface waters to control the amount and toxicity of pollutants entering the waters.
  - The act does not provide for a federal regulatory program for the control of nonpoint sources. Instead, states are to control them through management programs, such as requiring certain activities to apply practices that minimize or reduce the amount of pollutants reaching waters. (These are referred to as “best management practices.”)
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- Section 303 of the Clean Water Act contains provisions to address waters that do not meet water quality standards.
    - First, states must identify waters that do not meet standards on what is referred to as a “303d list.”
    - Next, states develop total maximum daily loads (TMDL) for those waters to reduce the amount of pollutants entering the water so that water quality standards can be attained.
  - EPA is required to develop a list and TMDLs if states fail to do so.
  - EPA must approve state-developed lists and TMDLs.
  - TMDLs were required by the 1972 act. EPA first issued regulations for the program in 1985 and guidance in 1991.
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- As of 1999, about 20,000 waters were identified as not meeting standards on states’ 303d lists, and EPA estimates these waters could require up to 40,000 TMDLs.
  - There is widespread recognition that implementation of the TMDL program has only recently begun. At the time of proposal, not all states had submitted 303d lists, and EPA did not vigorously enforce the requirement to submit TMDLs until recently.
  - According to EPA, currently all states have submitted 303d lists and the process to establish TMDLs is underway. In addition, EPA officials told GAO that in 17 lawsuits alleging state and EPA inaction, courts have established judicially enforceable deadlines for states to develop TMDLs.
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- In 1996, EPA established an advisory committee to make recommendations for improvements and possible regulatory changes to the TMDL program; its recommendations included that
    - an implementation plan should be required with each TMDL;
    - TMDL development should occur within 15 years of a water being listed; and
    - EPA should strengthen its technical guidance and support to improve states' capacity in developing TMDLs.



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Agencies must comply with a number of statutory requirements when proposing regulations, including:

- The Regulatory Flexibility Act (5 U.S.C. 601-612) requires an initial regulatory flexibility analysis unless the agency determines that a proposed regulation will not have a significant economic impact on a substantial number of small entities.
  - Title II of the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531-1537) generally requires an analysis of costs, benefits, and alternatives for proposed regulations that include a federal mandate that may result in expenditures of \$100 million or more by state, local, and tribal governments in the aggregate, or by the private sector, in any one year.
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Executive Order 12866 also sets forth principles of regulation and directs agencies to conduct certain analyses in rulemaking:

- Agencies should assess the potential costs and benefits of available regulatory alternatives when deciding whether and how to regulate.
  - Agencies should select those approaches that maximize net benefits, among other factors like environmental quality, and base their decisions on the best obtainable information concerning the need for, and consequences of, the intended regulation.
  - Similar to UMRA, agencies must conduct benefit-cost analyses for regulations expected to result in a \$100 million annual effect on the economy or that are otherwise economically significant.
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OMB Best Practices

- OMB has used its January 1996 “Best Practices” document as general criteria for reviewing economic analyses, including the analyses of the two proposed EPA regulations.

EPA Guidance

- EPA has a number of draft guidance documents that its offices use at their own discretion.
  - EPA used a April 1998 draft for their analyses of these proposed regulations.
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On August 23, 1999, EPA proposed revisions to regulations on the TMDL and NPDES programs with the intent:

- (for the TMDL program) to clarify and strengthen how TMDLs are established so they can more effectively contribute to improving the nation's water quality, and to achieve "reasonable assurance" that an established TMDL will be implemented and that water quality standards will be attained.
  - (for the NPDES program) to achieve reasonable further progress toward attaining water quality standards in impaired waters (i.e., waters that do not meet standards) prior to EPA approval or establishment of a TMDL.
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### **EPA's Proposed Revisions Affecting the TMDL Program**

The primary changes to the TMDL program include requiring the states to

- establish a more comprehensive format for lists identifying waters that do not meet standards,
  - consider specific factors when prioritizing their listed waters,
  - establish a 15-year schedule in which to develop TMDLs for waters once listed,
  - include 10 specific elements in a TMDL, and
  - develop implementation plans that include 8 elements such as demonstrating "reasonable assurance" that a TMDL will be implemented.
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- The reasonable assurance requirement is intended to help ensure that pollutant reduction allocations in a TMDL will be implemented such that water quality standards will be attained and maintained. This means that
    - for point sources, states will issue enforceable NPDES permits and
    - for nonpoint sources (like farms), states must demonstrate that controls are likely to be implemented, such as through state regulations.
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- EPA estimated the annual cost that states would incur in implementing the proposed TMDL revisions to be between \$10.3 million and \$24.4 million per year (in 1999 dollars) from 1999 through 2015; EPA did not quantify or monetize benefits; it briefly mentioned potential benefits in the proposed rule.
  - The areas in which EPA estimated costs included
    - developing implementation plans (\$5.3 million to \$14.3 million per year),
    - administrative costs to the states resulting from public participation requirements (\$4.8 million to \$9.5 million per year), and
    - administrative costs to EPA such as for reviewing implementation plans (about \$18,000 annually).
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- According to EPA, these are the costs that states would incur as a result of the proposed regulations. The amounts do not include costs to meet current regulations, consent decrees, and state commitments.
    - Much of the TMDL process is already required in current regulations.
    - As of the date of EPA's economic analysis (December, 1998), consent decrees in about 12 states set court-ordered schedules for developing TMDLs.
    - Most other states have submitted schedules to EPA for developing TMDLs for currently listed waters, within a specified timeframe.
    - No costs to the private sector were estimated because the proposed rule only changes requirements applicable to states and tribes.
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- In estimating the costs of the proposed regulation, EPA made several key assumptions:
    - All states are either in full compliance, or will be, with current TMDL program requirements (i.e., TMDLs for currently listed waters will be developed) because (1) states are committed to developing TMDLs under either a consent decree or through commitments made to EPA, or (2) because of the threat of a lawsuit for inaction.
    - In the future, there will be no increase in the current listing of about 20,000 water bodies.
    - The private sector will incur no additional costs as a result of the proposed revisions.
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**Limitations in EPA's Analysis Raise Concerns  
About Usefulness of Cost Estimates**

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- Limitations in EPA's economic analysis raise concerns about its usefulness for decision-making. Our concerns relate to EPA's
    - assumption of full compliance with existing regulations,
    - use of key water quality and cost data that are of limited quality, and
    - exclusion of
      - costs to other federal agencies,
      - private sector costs,
      - an analysis of a lower discount rate, and
      - analysis of benefits.
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**EPA Assumed Full Compliance  
Despite Uncertainty**

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- EPA's analysis does not include costs that states will incur to comply with current TMDL requirements because EPA states that those costs are the result of existing statutory and regulatory requirements and not the result of this proposed rule.
  - EPA's April 1998 guidance for conducting economic analyses states that such an assumption of full compliance is reasonable in many cases. In particular, it states that unless noncompliance is known and can be reasonably estimated, the analysis should assume full compliance with an existing regulation in the baseline.
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- Nonetheless, EPA's guidance does allow discretion as to whether full compliance with existing regulations should be assumed in the analysis. For example, the guidance also states that:
    - "If it is known that there is noncompliance with an existing regulation that is being tightened (i.e, replaced with a more stringent regulation), then the analysis should be performed in two stages, if possible. First, the incremental benefits and costs associated with attaining full compliance with the existing regulation should be estimated. The analysis should then estimate the costs and benefits of moving from full compliance with the existing regulation to full compliance with the tighter regulation."
  - Furthermore, both EPA's guidance and OMB's January 1996 "Best Practices" for conducting economic analyses recognize that full compliance is often not a reality and that the degree of compliance with existing regulations can significantly affect the results of the analysis.
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- Although EPA assumed full compliance, we believe there is substantial uncertainty about whether the states are, or will be, in full compliance with requirements to develop TMDLs for impaired waters, given that
    - only about 1,300 of the up to 40,000 needed TMDLs had been received and approved by EPA through FY1999,
    - certain state commitments regarding schedules to complete TMDLs are nonbinding and may be dependent on availability of state funding,
    - states could be further burdened by additional possible listings of impaired waters and required TMDLs (and implementation plans), and
    - funding for the TMDL program was not a priority until FY 1998 and competes with many other priority activities such as NPDES permitting and enforcement.
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- OMB's Best Practices further states that when uncertainty exists about the baseline (or the way the world would look absent the regulation), sensitivity analyses may be warranted.
  - In addition, OMB officials told us that in this particular case, where substantial uncertainty exists about the level of implementation of current regulations, ideally it may have been appropriate to do sensitivity analyses of alternative compliance rates.
  - Given the uncertainty associated with the rate of compliance, we believe that sensitivity analyses to assess the effect of alternative compliance rates on the cost estimate would have been appropriate.
  - Such analyses would likely have indicated a range of possible costs exceeding those estimated by EPA.
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- In addition, there is reason to believe that the proposed regulations would accelerate compliance with existing regulations. EPA officials told GAO that the proposed rule will make the TMDL program more effective and will reduce the uncertainty associated with achievement of water quality goals.
    - If so, both the benefits and costs associated with achieving such compliance more quickly should be attributed to the proposed regulations, rather than existing regulations. These costs are not included in EPA's cost estimate.
  - Finally, USDA officials told GAO that in assessing the costs of the proposed rule, they would assume that states are not in compliance with existing TMDL regulations.
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There are several questions regarding the quality of the data EPA used in its analysis.

- The data EPA used to estimate the number of impaired waters and required TMDLs are, in some respects, incomplete and unreliable.
    - GAO recently reported that states' assessments of water quality are generally based on a small percentage of monitored waters, may rely on outdated or unconfirmed data, and are conducted inconsistently across states.
    - EPA's own cost analysis acknowledges that additional monitoring in future years will "undoubtedly" identify additional impaired waters.
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- These limitations add to the uncertainty surrounding EPA's cost estimate because the estimate
    - does not account for the potential future listings of additional waters needing TMDLs and implementation plans.
    - is based on data that are in some cases unreliable.
  - Given these limitations, a sensitivity analysis to assess the effect of data uncertainty on the cost estimate would have been appropriate.
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- EPA did not include the costs that other federal agencies might incur as a result of the proposed rule.
    - USDA officials told GAO that their workload may increase in several areas as a result of the proposed regulation, including providing technical support to EPA, states, and farmers (e.g., developing water quality management plans).
  - The estimate for the cost states would incur to do an implementation plan for a TMDL was based on data from a single state official.
    - EPA did not verify whether these data were representative of all states.
    - As a result, EPA's estimate of the cost to do an implementation plan may not be representative of costs incurred by other states.
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- EPA did not include the costs that certain private sector entities will likely incur as a result of the proposed regulations because, according to EPA officials, these costs would be incurred anyway under existing regulations and/or entities will voluntarily implement controls.
  - However, major changes from the proposed regulations include the emphasis on TMDL implementation through the implementation plan, and the reasonable assurance provision. These provisions are intended to provide added assurance that water quality standards will be met.
  - As a result of states' implementation of reasonable assurance, nonpoint sources such as farms will likely incur costs to control discharges to water bodies.
  - USDA officials told GAO that they believe the private sector will incur additional costs as a result of the proposed rule.
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**EPA Did Not Assess the Effect of a Lower Discount Rate**

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- EPA did not assess the effect of a lower discount rate on estimated costs.
    - EPA used a 7-percent (real) discount rate--the rate OMB recommends--to discount future costs to the present.
    - However, OMB's Circular A-94 (economic guidance) also recommends that agencies use alternative discount rates to assess the effect of discounting on the present value of benefits and costs.
    - According to OMB officials, EPA analysts usually conduct sensitivity analyses of the discount rate using a lower rate.
  - Because many costs (and benefits) associated with implementing TMDLs will occur well into the future, a sensitivity analysis using a lower rate would be appropriate.
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**EPA Did Not Estimate Benefits**

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- Executive Order 12866 states that agencies shall assess both the benefits and costs for significant regulatory actions, regardless of whether the regulation is economically significant or not--EPA's rule was deemed significant by the agency because it addressed "novel legal or policy issues".
  - EPA did not quantify (and monetize) the proposed rule's benefits and, as a result, its analysis does not indicate whether the expected benefits of the rule outweigh expected costs.
  - EPA officials stated that because the proposed rule was not economically significant (i.e., would not have an annual effect on the economy of \$100 million or more) they did not believe they were required to quantify the benefits of the proposed rule. Instead, the benefits were briefly mentioned in the proposal for the rule.
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- OMB officials told us that ideally federal agencies should assess both benefits and costs of proposed regulations to compare the net benefits of alternative regulatory actions.
  - Although EPA’s proposed regulation may have benefits, without a monetary estimate of both the benefits and costs, we cannot confirm that the rule is economically justified (i.e., that it would have positive net benefits).
  - EPA officials told GAO that under OMB’s Best Practices, the agency is not required to quantify benefits.
  - Nonetheless, we believe it is good economic practice to express both benefits and costs in comparable dollar terms in order to identify net benefits.
  - In any case EPA’s qualitative discussion of the proposed regulation’s potential benefits was very limited.
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### **EPA’s Proposed Revisions Affecting the NPDES Program**

The primary changes to the NPDES program include

- requiring new large or significantly expanding dischargers to obtain an “offset” (or pollutant reduction) of 1.5 times their proposed discharge before discharging to an impaired water,
  - giving states and EPA, under certain circumstances, discretionary authority to require discharges of stormwater from forestry activities to have a NPDES permit,
  - giving EPA authority to designate certain sources, including some animal feeding operations and aquatic animal production facilities, as needing NPDES permits in cases where EPA develops a TMDL, and
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(changes to NPDES continued)

- providing EPA authority to object to, and ultimately reissue, expired and state-issued permits that have been administratively-continued for discharges to impaired waters in NPDES-authorized states where there is no TMDL or the permit contains limits that are inconsistent with a TMDL.



- EPA estimated the annual costs to private entities and federal and state governments in implementing the proposed NPDES regulation to be between \$17.2 million and \$65.2 million per year (1999 dollars) from 1999 to 2015; EPA did not quantify/monetize benefits; it briefly discussed them.
  - The major areas in which EPA estimated costs were
    - the construction industry/other storm water dischargers for obtaining offsets (\$11.33 to \$41.76 million per year),
    - the silvicultural industry to implement pollutant controls (\$3.45 million to \$12.93 million per year),
    - animal feeding operations and aquatic animal production facilities to implement pollutant controls (\$1.92 million to \$9.58 million per year), and
    - federal and state governments' administrative costs (\$0.515 million to \$ 0.964 million per year).
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- To estimate the costs of the proposed regulation, EPA made several key assumptions:
    - The silvicultural industry will incur additional control costs in just 20 states because 30 states already have, or will have, comprehensive and enforceable state laws and/or programs that would be used instead of NPDES to control pollutants from silvicultural operations.
    - Existing federal and state authority is sufficient to control discharges from silvicultural operations on public lands.
    - Firms required to obtain offsets would essentially incur no delay in finding an offset to reduce discharges.
    - EPA would invoke its authority to issue permits to animal feeding operations and aquatic animal production facilities in only limited instances.
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- Limitations in EPA's analysis raise concerns about its usefulness for decision-making. Our concerns relate to EPA's
    - assumption that federal agencies and most states have or will have (and use) enforceable authorities to control discharges from silvicultural operations,
    - exclusion of costs to control activities such as regenerating harvested sites, and controlling pests/fire,
    - assumption that firms would incur no delay in obtaining offsets,
    - use of key water quality data that are of limited quality, and
    - exclusion of analyses of
      - a lower discount rate and
      - benefits.
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- Based on an Environmental Law Institute study, EPA assumed that 30 states would incur no costs for silvicultural controls because 20 have enforceable authorities and 10 will develop such authorities by 2008.
  - This assumption is subject to substantial uncertainty:
    - EPA's proposed rule does not specify the criteria by which states' forest regulatory programs will be deemed sufficiently comprehensive and adequate.
    - Forestry experts and several state foresters in states with comprehensive authorities told GAO that states could incur additional costs if EPA requires states to adopt more stringent regulatory standards.
    - In addition, there is uncertainty about whether current state programs are adequate and effective at controlling discharges from silvicultural sources.
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- Some of the states with existing authorities have waters currently listed as impaired by silviculture; it is unclear whether these impairments are result of ineffective controls, lack of enforcement, or poor practices before authority was established.
  - An official from the Environmental Law Institute told GAO that there are essentially no national data on the effectiveness of current state silvicultural best management controls.
  - EPA's estimate of 10 states developing authorities was based on the rate of program development in the 1990's, with no clear evidence that such a rate is likely to continue.
    - Given this uncertainty, sensitivity analysis on the rate of program development would have been appropriate.
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## Enclosure I



### EPA Assumed Public Landowners Have Adequate Authority for Silviculture

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- EPA assumed that federal and state agencies have adequate authority to control discharges from silviculture on federal and state lands.
  - However, according to an EPA official, the proposed regulation does not preclude EPA from permitting silvicultural sources on federal lands (i.e., after developing a TMDL for impaired waters).
  - In addition, it is not clear that existing federal or state authorities are always implemented. For example, a USDA official told GAO that it is optimistic to assume that federal agencies will implement BMPs in all cases.
  - As a result, EPA's cost estimate does not account for the possibility that permits might be required to reduce discharges on public forest lands.
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### EPA's Control Cost Estimate Focuses Primarily on Timber Harvesting

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- EPA's estimate of the cost of applying best management practices for silviculture is primarily based on the volume and acres of timber harvested in counties with impaired waters. The cost of applying best management practices for certain other activities are not reflected in this cost estimate. Other possible activities are:
    - post-harvest site preparation and artificial regeneration of trees. EPA's proposed regulation states that site preparation activities may cause significant adverse impacts on water quality; and
    - pest and fire control.
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## Enclosure I



### EPA's Analysis of Costs of Obtaining Offsets Does Not Include Potential Delay Costs

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- In estimating the cost of offsets, EPA's cost estimate does not account for the potential cost of delay that a firm may incur due to an inability to obtain the needed pollutant reductions (such as from other firms discharging to the same impaired water).
  - Although EPA's analysis recognized that delay is possible, it assumed these firms would be able to purchase an offset by the time the facility construction or expansion project is approved (about three years).
  - However, the market for nonpoint source offsets is not well defined and there has been minimal trading to date.
  - Thus, there is some uncertainty as to whether firms will be able to purchase offsets--any delay in time required to purchase offsets could impose additional costs on the firm.
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### EPA Cost Estimate Does Not Account for More Aggressive Application of State Controls

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- According to EPA, states will avail themselves of all existing authorities before using burdensome and costly NPDES permits.
  - If this is true, this would create an added incentive for the states to implement their existing authorities more aggressively.
  - Accordingly, more aggressive implementation would impose control costs on silvicultural and animal feeding and aquatic production facilities that would be a result of the proposed regulation.
  - These costs are not included in EPA's cost estimate.
-



There are several questions regarding the quality of the data EPA used in its analysis.

- The data EPA used to estimate the number of impaired waters and need for NPDES permits are, in some respects, incomplete and unreliable.
    - GAO recently reported that states' assessments of water quality are generally based on a small percentage of monitored waters, may rely on outdated or unconfirmed data, and are conducted inconsistently across states.
    - EPA's own TMDL cost analysis acknowledges that additional monitoring in future years will "undoubtedly" identify additional impaired waters.
- 



- These limitations add to the uncertainty surrounding EPA's cost estimate because the estimate
    - does not account for the potential future listings of additional impaired waters needing TMDLs, implementation plans, and NPDES permits.
    - is based on data that are in some cases unreliable.
  - Given these limitations, a sensitivity analysis to assess the effect of data uncertainty on the cost estimate would have been appropriate.
-



- EPA did not assess the effect of a lower discount rate.
    - EPA used a 7-percent (real) discount rate--the rate OMB recommends--to discount future costs to the present.
    - However, OMB's Circular A-94 (OMB's guidance on discount rates) also recommends that agencies conduct sensitivity analyses to assess the effect of discounting on the present value of benefits and costs.
    - According to OMB officials, EPA analysts usually conduct sensitivity analyses using a lower rate.
  - Because many costs (and benefits) associated with permitting point sources will occur well into the future, a sensitivity analysis using a lower rate would be appropriate.
- 



- Executive Order 12866 states that agencies shall assess both the benefits and costs for significant regulatory actions, regardless of whether the regulation is economically significant or not--EPA's rule was deemed significant by the agency because it addressed "novel legal or policy issues".
  - EPA did not quantify (and monetize) the proposed rule's benefits and, as a result, its analysis does not indicate whether the expected benefits of the rule outweigh expected costs.
  - EPA officials stated that because the proposed rule was not economically significant (i.e., would not have an annual effect on the economy of \$100 million or more) they did not believe they were required to quantify the benefits of the proposed rule. Instead, the benefits were briefly mentioned in the proposal for the rule.
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- OMB officials told us that ideally federal agencies should assess both benefits and costs of proposed regulations to compare the net benefits of alternative regulatory actions.
- Although EPA's proposed regulation may have benefits, without a monetary estimate of both the benefits and costs, we cannot confirm that the rule is economically justified (i.e., that it would have positive net benefits).
- EPA officials told GAO that under OMB's Best Practices, the agency is not required to quantify or monetize benefits.
- Nonetheless, we believe it is good economic practice to express both benefits and costs in comparable dollar terms in order to estimate net benefits.
- In any case, EPA's qualitative discussion of the proposed regulation's potential benefits was very limited.



Regulatory Flexibility Act

- EPA's determination that it was not required to conduct further analyses under the Regulatory Flexibility Act for either proposed regulation is adequately supported by case law. (See enclosure III for detailed legal analysis.)
- While the proposed rules do not themselves *directly* regulate small entities and while EPA fully complied with the Regulatory Flexibility Act, this does not mean that future actions taken by EPA and the states pursuant to these regulations will not have economic impacts on small entities.



Unfunded Mandates Reform Act

- Nothing in UMRA's language, legislative history, or case law definitively addresses how agencies are to perform preliminary economic assessments or to select the appropriate baseline in order to determine whether UMRA's \$100 million threshold has been met.
  - UMRA's legislative history does indicate that the spirit and intent of Title II of UMRA are meant to be entirely consistent with the relevant portions of Executive Order 12866.
  - OMB's Best Practices states that it was designed to help agencies meet the analytical requirements of the Executive Order and of UMRA.
- 



Unfunded Mandates Reform Act

- EPA officials told us they used OMB's Best Practices and EPA's April 1998 draft guidance for performing the economic analyses on the TMDL and NPDES proposed rules.
  - GAO therefore used these two documents in assessing EPA's compliance with UMRA.
  - Limitations concerning EPA's economic analysis call into question the agency's estimates of the potential costs of both proposed regulations.
  - Therefore, we disagree with EPA that the agency adequately supported its determination that the annual costs will not exceed \$100 million, and that additional analyses required by Title II of UMRA were not needed.
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Comments From The Environmental Protection Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 16 2000

Mr. Peter Guerrero  
Director  
Environmental Protection Issues  
United States General Accounting Office  
Washington, DC 20548

OFFICE OF  
WATER

Dear Mr. Guerrero:

Thank you for the opportunity to comment on your draft report, *Clean Water Act: Proposed Revisions to EPA Regulations to Clean Up Polluted Waters*. In the report, the General Accounting Office (GAO) reviewed the analysis that the Environmental Protection Agency (EPA) did to support proposed revisions to existing regulations concerning the Total Maximum Daily Load (TMDL) program and related Clean Water Act permit program regulations.

The draft report correctly concludes that EPA correctly interpreted the Regulatory Flexibility Act (RFA). However, it wrongly concludes that EPA should have done more analysis under the Unfunded Mandates Reform Act (UMRA). In addition, the draft report overstates the uncertainties related to water quality data and forestry practices. Finally, the draft report's conclusion that the Agency did not conduct the necessary assessment of benefits is incorrect. Providing this report to the Congress in its current form will misinform Members of Congress and confuse public discussion of the Nation's efforts to restore over 20,000 polluted waters across the country.

**A) EPA Properly Implemented the Unfunded Mandates Reform Act --**

See comment 1.

The most significant error in the draft report concerns GAO's assessment of the assumptions used in preparing the economic analysis of the proposed rule. These assumptions are supported by the facts and comply with both the letter and intent of guidance from the Office of Management and Budget (OMB) and from EPA regarding what should be included in the "baseline" of an economic analysis for the Agency's UMRA determinations.

See comment 2.

It is essential to understand that the Clean Water Act (section 303(d)) requires States and EPA to implement the TMDL program and that States and EPA are actively developing TMDLs under existing program regulations. EPA's baseline assumption that the States and EPA are working over time to comply with the current law and its implementing regulation is reasonable and appropriate.

EPA properly followed OMB and EPA guidance in developing a careful and complete

## Enclosure II

See comment 3.

assessment of the economic costs of the proposed rule (i.e. the difference between the estimated cost to implement the proposed rule and the estimated cost to implement the statutes and the existing rule). EPA was required to assess the impact of requirements in the proposed rule, not the requirements of the statute and existing rule. To my knowledge, in the five years that UMRA has been in effect, OMB has not interpreted UMRA as requiring EPA to include in our cost assessments costs of statutes and rules already in effect. Moreover, OMB carefully reviewed the entire TMDL proposal, including all the economic analysis and cleared the rule for publication in the Federal Register. OMB would not have cleared the proposed rule if it did not comply with OMB guidance.

See comment 4.

As GAO notes in its draft briefing slide on UMRA, "[n]othing in UMRA's language, legislative history, or case law definitely addresses how agencies are to perform preliminary economic assessments or to select the appropriate baseline in order to determine whether UMRA's \$100 million threshold has been met." Under these circumstances, agencies have discretion to reasonably interpret what the statute requires. EPA reasonably interpreted the analytical requirements of UMRA, consistent with OMB's guidance and EPA's 1998 Guidance, in assessing the costs of implementing the proposed TMDL and NPDES rules. Our assessment fulfills the requirements of UMRA and that we adequately supported our determinations under both UMRA and the RFA in the proposals.

See comment 5.

Unfortunately, the draft report indicates that GAO misunderstands OMB and EPA guidance concerning estimates of baseline costs under existing regulations. Where a proposed regulation does not change the environmental or public health standard of an existing regulation, OMB and EPA guidance indicate that an assumption of full compliance with the regulation is appropriate. The standards for protection of water quality are established by States under the Clean Water Act and, in rare cases, by specific EPA regulations. The TMDL program regulations and the changes to the permit program regulations do not change water quality standards or establish a more stringent standard for protecting the environment and public health. Rather, the regulations clarify the procedures that States and others are to follow in determining the best way to meet the same environmental and public health standards. These proposed regulations, therefore, are not governed by the elements of economic analysis guidance concerning more stringent environmental and human health standards.

Where regulations establish standards for protection of public health and the environment that are more stringent than existing standards, OMB guidance allows agencies to *choose* whether to include assumptions about known noncompliance in the economic analysis. Even if the TMDL and permit program rule modifications that EPA proposed were judged to be a change in the standard of protection of the environment and human health per the OMB guidance, the OMB guidance only recommends -- but does not require -- that an economic assessment include assumptions concerning known noncompliance.

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## Enclosure II

### B) EPA Properly Addressed Uncertainty –

See comment 6. Every assessment of economic consequences of regulations to protect the environment and public health involves some uncertainty. OMB guidance recognizes uncertainty and provides that "each agency shall base its decisions on the best reasonably obtainable" information concerning the intended regulation. EPA properly addressed uncertainties and fully complied with applicable guidance with respect to both water quality data and assessments of forestry pollution controls. In addition, EPA requested public comment on topics where uncertainty exists.

See comment 7. The Agency recognized that some uncertainty existed concerning water quality data. Given the nature of water resources throughout the country, there always will be uncertainty about the condition of waters. EPA complied with the guidance on this point, using the best available data: water quality information provided by the States. In addition, the draft report wrongly implies that the uncertainty about water quality data caused EPA to seriously underestimate the extent of pollution problems. The draft report cites another GAO report on the topic of water quality data, but fails to cite the conclusion in that report that "the State officials we interviewed said they feel confident that they have identified most of their serious water quality problems."

### C) EPA Properly Assessed Benefits

See comment 8. The draft report wrongly states that "EPA did not analyze the benefits of the proposed regulations." In fact, EPA considered the benefits of the proposed regulations and described the expected benefits in the preamble to the proposed rule (page 46013, 46015, and other places). OMB guidance states that agencies should provide a qualitative assessment of most rules, but only a quantitative assessment of rules that have costs of over \$100 million or have other comparable impacts on the economy. Because EPA properly determined that overall costs of the rules was not more than \$100 million, a quantitative assessment of benefits was not required.

See comment 9. EPA provided a complete and accurate assessment of economic and other aspects of the proposed TMDL rule and this analysis adequately supported our determinations under UMRA and RFA. It is highly inappropriate for the draft report to conclude that EPA did not fully comply with all the applicable analytical requirements, particularly when GAO notes in its draft briefing materials that nothing in UMRA's language, legislative history, or case law definitively addresses the areas that GAO disagrees with EPA. GAO may believe that it would have been desirable for EPA to have provided different or supplemental economic analysis of the proposed rule. While additional analysis is always possible, the time and cost of exploring all analytical avenues must be weighed against delay in the significant benefits to the Nation of a more efficient process to restore over 20,000 polluted waters and meet the goals of the Clean Water Act. Additional concerns with other aspects of the draft report are provided as an enclosure to this letter.

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## Enclosure II

I strongly request that GAO will reconsider and revise your assessment of EPA's work on these rules to the Congress and other interested parties. I will be pleased to work with you in this effort.

Sincerely,



J. Charles Fox  
Assistant Administrator

Enclosure

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GAO/RCED-00-206R TMDL Regulations

The following are GAO's comments on the Environmental Protection Agency's letter dated June 16, 2000.

### **GAO's Comments**

1. EPA states that GAO incorrectly assessed the reasonableness of the assumptions used in estimating the costs of the TMDL and NPDES proposed regulations. However, as our report indicates, there is substantial uncertainty about several of the key assumptions and data used by EPA, which could affect the cost estimates derived. Among the most important of these is EPA's assumption that all states are or will be in compliance with existing TMDL regulations. It is clear there is current noncompliance and we believe there is uncertainty as to when states will be in compliance. For example, while EPA has told us that existing consent decrees and future lawsuits will be the primary driver for states to get into compliance, litigation in some states were dismissed and a few consent decrees address only a subset of waters in a state. In addition, as our report notes, only about 1,300 of the needed 20,000 to 40,000 TMDLs had been developed through fiscal year 1999; state commitments made to EPA regarding schedules for TMDL development are non-binding; and additional efforts will be needed by states to develop TMDLs for newly identified polluted waters. Furthermore, funding for TMDL activities has just recently become a funding priority and must compete with other priority activities.

In cases of such uncertainty about compliance, both OMB's Best Practices and EPA's economic guidance suggest the consideration of alternative compliance rates in assessing the economic effect of proposed regulations. Indeed, in cases such as this one, where it is known that there is noncompliance with a regulation that is being tightened, EPA's guidance states that the analysis should estimate costs associated with attaining full compliance with the existing regulation and then estimate the costs of moving to full compliance with the tighter regulation.

2. EPA notes that both the agency and the states are actively developing TMDLs, and that this justifies its baseline assumption that "the states and EPA are working over time to comply with the current law and its implementing regulation." This statement acknowledges that there is current noncompliance with existing regulations. However, EPA's cost estimates do not account for this noncompliance. As discussed above in response to comment 1, both OMB's Best Practices and EPA's economic guidance suggest that noncompliance with existing regulations be considered when assessing the costs of proposed regulations.
3. EPA states that OMB has not interpreted UMRA as requiring an assessment of the costs of existing regulations. While we have not reviewed OMB's record in this regard, OMB's Best Practices and EPA's economic guidance speak directly to this point. OMB's Best Practices document, which was issued to assist agencies in conducting economic analyses under Executive Order 12866 and UMRA, and EPA's economic guidance both state that an agency's economic analysis should consider the way the world would look absent the proposed regulation (referred to as the "baseline") and that many factors may influence this scenario—including the degree

of compliance with existing regulations. EPA's own guidance for conducting economic analyses states that, "If it is well known that there is noncompliance with an existing regulation that is being tightened (i.e., replaced with a more stringent regulation), then the analysis should be performed in two stages, if possible." The guidance goes on to state that the two stages should include estimates of the costs of attaining full compliance with the existing regulations and the costs of moving to full compliance with the tighter regulations. Therefore, we believe it would have been appropriate for EPA to consider alternative baselines with regard to compliance with *existing* regulations. We discussed our interpretation of OMB's Best Practices with OMB officials and they agreed that it was correct.

4. EPA agrees with our statement that there is nothing in UMRA's language, legislative history, or case law that definitively addresses how agencies are to perform economic analyses. The agency also appears to agree that OMB's Best Practices and EPA's economic guidance help instruct how these economic analyses are to be performed. Given EPA's assertions of certainty with its key assumptions in its economic analyses, EPA believes that it did follow its own guidance. However, as discussed in our response to comments 1 and 2 above, we believe there are substantial uncertainties as to when states will be in full compliance, and as to the number of waters needing TMDLs in the future. Given these uncertainties, we believe it would have been appropriate to conduct sensitivity analyses, in accordance with OMB's Best Practices and EPA guidance, to assess uncertainty in its assumptions and with key data used.
5. EPA states that we misunderstood OMB's Best Practices and EPA's guidance concerning estimates of baseline costs under existing regulations. EPA then states, without page citations, that "where a proposed regulation does not change the environmental or public health standard of an existing regulation, OMB and EPA guidance indicate that an assumption of full compliance with the regulation is appropriate." There is no such statement in either document. Indeed, as we point out in comments 1 and 3, EPA's guidance specifically provides that if it is known that there is noncompliance with an existing regulation that is being tightened (i.e., replaced with a more stringent regulation), both the costs of attaining full compliance with the existing regulation and the costs of moving to full compliance with the new regulation should be estimated. In this case, the proposed regulation states that it "strengthens" the current TMDL regulatory requirements so that TMDLs "can more effectively contribute to improving the nation's water quality." In particular, the proposed regulation will require states to develop TMDLs within 15 years of listing impaired waters, and to provide reasonable assurance that controls will be implemented so that water quality standards will be attained and maintained. Because the TMDL regulation is clearly being tightened, we believe the provision of EPA's guidance recommending estimation of the costs of attaining full compliance with existing regulations is applicable here.
6. EPA cites OMB's Best Practices as stating that when faced with uncertainty, agencies should base "[their] decisions on the best reasonably obtainable" information concerning the intended regulation. We recognize that available information is often

imperfect, and that it is appropriate under such circumstances to rely on the “best reasonably obtainable” information. However, there is substantial uncertainty about EPA’s key assumptions and data, and EPA did not assess the effect of these uncertainties on its cost estimates. We believe that the appropriate course of action would have been to use sensitivity analyses to assess the effect of alternative assumptions on the cost estimates. Such an approach would have presented a more realistic picture of the range of potential costs.

7. EPA states that GAO “wrongly implies that the uncertainty about water quality data caused EPA to seriously underestimate the extent of pollution problems.” We continue to believe that the uncertainty over the completeness and reliability of water quality data substantially adds to the uncertainty surrounding EPA’s cost estimate because it directly affects the number of water bodies EPA assumes are impaired and will therefore require TMDLs. EPA’s TMDL cost analysis in fact acknowledges that there is considerable uncertainty in future listings of impaired waters. However, it does not account for potential future additional listings in its cost estimate. EPA also cites a recent GAO report in which state officials told us that they are confident that they have identified most of their serious water quality problems. In doing so, the agency appears to imply that few additional waters will require TMDLs. However, the same GAO report also states that state officials acknowledged that “more comprehensive monitoring would reveal additional problems.” In fact, in official agency comments on a draft of that report, EPA drew the same conclusion, stating that “...it is likely that some states, perhaps most, do not have enough data to identify all of the impaired waters because they have not achieved comprehensive assessment of all state waters.”
8. EPA states that our report incorrectly suggests that the agency did not analyze the benefits of the proposed regulations. It notes that per OMB’s Best Practices, it was required in this case only to provide a qualitative assessment of benefits, and described these benefits in the preamble to the proposed regulation. We have revised our report to state that EPA did briefly mention the benefits in the proposed regulations qualitatively. That said, the discussion of benefits in the preamble alluded to by EPA is so limited that it provides little evidence of a meaningful “assessment” of benefits, as called for by Executive Order 12866. For example, on page 46015 of the TMDL proposal, EPA states that it is revising the definition of a TMDL because “Current regulatory requirements have engendered different interpretations” and that states need “greater certainty in establishing TMDLs and submitting them to EPA for approval.” EPA also states that it needs a more precise definition “to promote consistency in reviewing and approving TMDLs nationally.” For the NPDES proposal, EPA states that it will “achieve reasonable further progress toward attaining water quality standards. . . .” EPA describes one way in which the proposal will accomplish this is by addressing the lengthy administrative continuance of permits that authorize discharges into impaired waters. It states that “[b]y not reissuing these permits, there is a delay in the implementation of needed water quality-based effluent limitations.”

## Enclosure II

9. EPA notes that while we may have thought it desirable for the agency to provide different or supplemental economic analysis of the proposed regulation, and that “while additional analysis is always possible,” time and cost considerations must also be weighed against delaying the issuance of a rule with significant benefits. We believe that in light of the high degree of uncertainty concerning the future costs of these regulations, the consideration of alternative assumptions was more than “desirable.” Further, statements in one of the economic analyses for the proposed regulations and by EPA staff do indeed indicate that time was a constraint in conducting a more thorough analysis, but it is important to note that these time constraints were the result of the schedule that EPA, itself, set for the issuance of its regulations.

**Assessment of EPA’s Determinations That No Further Analyses Were Required Under the Regulatory Flexibility Act for the TMDL or NPDES Proposed Rules**

The Environmental Protection Agency (EPA) certified that its proposed rules, Proposed Revisions to the Water Quality Planning and Management Regulation (“the TMDL proposed rule”),<sup>3</sup> and Proposed Revisions to the National Pollutant Discharge Elimination System Program and Federal Antidegradation Policy in Support of Revisions to the Water Quality Planning and Management Regulation (“the NPDES proposed rule”)<sup>4</sup> will not have a significant economic impact on a substantial number of small entities under section 605(b) of the Regulatory Flexibility Act (RFA).<sup>5</sup> You have asked us to assess these certifications. We believe EPA properly certified the proposed rules under the RFA.

The Regulatory Flexibility Act requires an agency, when proposing a rule for notice and comment, to “prepare and make available for public comment an initial regulatory flexibility analysis...[that] describe[s] the impact of the proposed rule on small entities,<sup>6</sup> including small businesses, small non-profit enterprises, and small governmental jurisdictions.<sup>7</sup> In addition, when promulgating a final rule, an agency must “prepare a final regulatory flexibility analysis” that describes, among other things, “a summary of significant issues raised by the public comments in response to the initial regulatory flexibility analysis, a summary of the assessment of the agency of such issues,” and “the steps the agency has taken to minimize the significant economic impact on small entities.”<sup>8</sup>

However, these analyses are not required if the agency “certifies that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”<sup>9</sup> EPA certified that neither the TMDL proposed rule nor the NPDES proposed rule will have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act.<sup>10</sup> Therefore, EPA did not prepare an initial regulatory flexibility analysis for either proposed rule.

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<sup>3</sup> 64 Fed. Reg. 46012 (1999) (to be codified at 40 C.F.R. pt. 130) (proposed Aug. 23, 1999). “TMDL” refers to “Total Maximum Daily Load.”

<sup>4</sup> 64 Fed. Reg. 46057 (1999) (to be codified at 40 C.F.R. pt. 122 et al.) (proposed Aug. 23, 1999). “NPDES” refers to “National Pollutant Discharge Elimination System.”

<sup>5</sup> 5 U.S.C. §§ 601-612 (1994 & Supp. IV 1998).

<sup>6</sup> *Id.* § 603(a).

<sup>7</sup> *Id.* § 601.

<sup>8</sup> *Id.* § 604(a).

<sup>9</sup> *Id.* § 605(b).

<sup>10</sup> 64 Fed. Reg. at 46041, 46082.

THE TMDL PROPOSED RULE

EPA's Certification

In support of its determination that no further analyses were required under the Regulatory Flexibility Act for the TMDL proposed rule, EPA states that the RFA requires analysis of the impacts of a rule on the small entities *subject to the rule's requirements*, citing United States Distribution Cos. v. FERC, 88 F. 3d 1105, 1170 (D.C. Cir. 1996); Mid-Tex Elec. Coop., Inc. v. FERC, 773 F.2d 327 (D.C. Cir. 1985); and Motor & Equip. Mfrs. Ass'n v. Nichols, 142 F.3d 449 (D.C. Cir. 1998). According to EPA, the proposed TMDL rule establishes no requirements applicable to small entities.

EPA explains that under section 303(d) of the Clean Water Act,<sup>11</sup> states, territories and Indian tribes authorized to do so by EPA must list impaired waterbodies and establish Total Maximum Daily Loads ("TMDLs"), or amounts of various pollutants that a body of water may receive and still allow the water to attain and maintain water quality standards. If EPA disapproves the efforts of these entities, it must prepare the lists and TMDLs itself. According to EPA, what the proposed rule does is set forth requirements for EPA, states, territories, and authorized tribes to follow when listing impaired waterbodies and establishing TMDLs. Listing and TMDL requirements are imposed only on these categories of entities and not on any small entities.

EPA further states that any economic impact on small entities of any lists or TMDLs established pursuant to the proposed regulation will be indirect and is highly speculative. First, EPA states, no impact flows directly from this proposed regulation. Instead, any impact on small entities that discharge pollution into waterbodies would result from future action by states, territories, authorized tribes, or EPA in listing impaired waterbodies, establishing TMDLs, and then implementing them. This future economic impact on small entities may flow from the TMDLs because the TMDLs are to allocate to individual pollution sources or categories of sources (which may be small entities) amounts of pollution that may not be exceeded, and the TMDLs are to have implementation plans that assure that such sources do not exceed the amounts of pollution allocated to them.

However, EPA notes that states, territories, Indian tribes, and EPA have considerable discretion under the Clean Water Act and the proposed regulation concerning which waterbodies to list, how to prioritize such waterbodies, how to schedule the waterbodies for TMDL development, and how to calculate and apportion TMDLs among pollution sources. Thus, it is impossible to predict the eventual impact (if any) of this proposed rule on any individual sources. This uncertainty is compounded, according to EPA, by the fact that EPA itself has no authority to enforce TMDLs for so-called "nonpoint" sources of pollution like

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<sup>11</sup> 33 U.S.C. § 1313(d) (1994).

### Enclosure III

agricultural operations, which do not discharge pollution from a discrete pipe or other point. TMDLs for such nonpoint sources are only enforceable to the extent that they are made so by state, territorial, or tribal laws and regulations, which means that EPA cannot reliably predict whether or to what extent pollution allocations will actually be implemented and therefore eventually impact small entities.

#### Legal Analysis

EPA's position that no further analyses were required for the TMDL proposed rule under the Regulatory Flexibility Act is supported by the case law interpreting the RFA. The courts have consistently held that an agency may properly certify that no regulatory flexibility analysis is necessary when it determines that the rule will not have a significant economic impact on a substantial number of small entities that are subject to the requirements of the rule.<sup>12</sup> Because the TMDL proposed rule would not itself subject small entities to any requirements, but instead would impose requirements on states, no regulatory flexibility analysis is required.

The leading case is Mid-Tex Elec. Coop., Inc. v. FERC, 773 F.2d 327 (D.C. Cir. 1996). In Mid-Tex, the Federal Energy Regulatory Commission (FERC) had proposed a federal rate standard that would regulate the wholesale rates of large electric utilities. Petitioners in the case, wholesale customers of the utilities, argued that the Regulatory Flexibility Act required FERC to consider whether its proposed rule would have a significant economic impact on wholesale customers as well as on the regulated utilities. Before the Commission, the Small Business Administration advocated that FERC should also consider the impact on retail customers of the utilities and even the impact on ultimate retail electric consumers, many of which were small businesses.

The court of appeals in Mid-Tex examined the language and legislative history of the RFA, in particular pointing to section 603 of the statute, which specifies the contents of the initial regulatory flexibility analysis. These initial analyses are to include "a description of and, where feasible, an estimate of the number of small entities *to which the proposed rule will apply*,"<sup>13</sup> and "a description of the projected reporting, recordkeeping and other *compliance requirements* of the

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<sup>12</sup> Michigan v. EPA, No. 98-1497, 2000 U.S. App. LEXIS 3209 (D.C. Cir. Mar. 3, 2000); American Trucking Ass'ns, Inc. v. EPA, 175 F.3d 1027, 1045 (D.C. Cir.), reh'g granted in part, denied in part, 195 F.3d 4 (D.C. Cir. 1999), cert. granted, 68 U.S.L.W. 3724 (U.S. May 22, 2000) (No. 99-1257); Motor & Equip. Mfrs. Ass'n v. Nichols, 142 F.3d 449, 467 (D.C. Cir. 1998); United Distribution Cos. v. FERC, 88 F.3d 1105, 1171 (D.C. Cir. 1996); Mid-Tex Elec. Coop., Inc. v. FERC, 773 F.2d 327, 342 (D.C. Cir. 1985). See also Southwestern Pennsylvania Growth Alliance v. Browner, 121 F.3d 106, 122 (3<sup>rd</sup> Cir. 1997); Colorado v. Resolution Trust Corp., 926 F.2d 931 (10<sup>th</sup> Cir. 1991) (where a rule contains no regulatory compliance requirements at all, no regulatory flexibility analysis is required under the RFA).

<sup>13</sup> 5 U.S.C. § 603(b)(3) (emphasis added).



### Enclosure III

proposed rule, including an estimate of the classes of small entities *which will be subject* to the requirement....”<sup>14</sup> The court concluded that “Congress did not intend to require that every agency consider every indirect effect that any regulation might have on small businesses in any stratum of the national economy.” *Id.* at 343. Instead, the court held, the problem Congress attempted to address with the RFA was the high cost to small entities of compliance with uniform regulations, and the remedy Congress fashioned—careful consideration of these costs in regulatory flexibility analyses—is accordingly limited to small entities subject to the proposed regulation. *Id.*

The principle articulated in Mid-Tex and its progeny has recently been applied in the context of environmental rulemaking. Last year, in American Trucking Ass’ns, Inc. v. EPA, EPA rules revising certain National Ambient Air Quality Standards (“NAAQS”) were challenged on a number of grounds, including on the basis that EPA had improperly certified that the revised NAAQS would not have a significant impact upon a substantial number of small entities under the Regulatory Flexibility Act. EPA argued that the NAAQS themselves impose no regulations upon small entities. Instead, under the Clean Air Act, the states regulate small entities through state implementation plans (SIPs) that provide for the attainment, maintenance, and enforcement of the NAAQS.<sup>15</sup> Because the NAAQS only regulate small entities indirectly—that is, insofar as they affect the planning decisions of the states—EPA concluded that small entities were not subject to the proposed regulation.

The American Trucking court of appeals found EPA’s description of the relationship between the NAAQS, SIPs, and small entities incontestable. 175 F.3d at 1044. According to the court, states have broad discretion in determining how they will achieve compliance with the NAAQS, and EPA has no authority, short of imposing its own SIP on non-complying states, to impose burdens on small entities. *Id.* In view of this discretion, the court held, small entities that are regulated by SIPs and bear the burdens of revised NAAQS are no more subject to the EPA’s regulation than the wholesalers in Mid-Tex were subject to regulation by FERC. *Id.* at 1045.

Finally, and most recently, the Court of Appeals for the D.C. Circuit rejected another Regulatory Flexibility Act challenge in another Clean Air Act decision, Michigan v. EPA, No. 98-1497, 2000 U.S. APP. LEXIS 3209 (D.C. Cir. Mar. 3, 2000). The case involved an EPA rule mandating that 22 states and the District of Columbia revise their state implementation plans to mitigate the interstate transport of ozone. The rule was issued under a provision of the Clean Air Act requiring SIPs to contain adequate provisions prohibiting sources of air pollution from emitting air pollutants in amounts that contribute significantly to other states’ nonattainment of National Ambient Air Quality Standards or interfere with

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<sup>14</sup> *Id.* § 603(b)(4) (emphasis added).

<sup>15</sup> See Clean Air Act § 110, 42 U.S.C. § 7410 (1994).

### Enclosure III

other states' maintenance of those standards.<sup>16</sup> Under the rule, states were required to revise their SIPs to include controls on sources of nitrogen oxide, an ozone precursor.

The court in Michigan v. EPA stated that under the applicable case law, the issue in evaluating whether EPA had properly certified that the rule would not have a significant impact on a substantial number of small entities under the RFA was whether the rule “regulates” small entities. The court agreed with EPA that the rule did not directly regulate individual sources of emissions. Instead, the court stated, the rule would require states to develop, adopt, and submit SIP revisions that would achieve the necessary nitrogen oxide reductions and leave to the states the task of determining how to obtain those reductions, including which entities to regulate. Thus, the court concluded, the case was analogous to American Trucking, in that the rule at issue regulated small entities only indirectly.

The principle articulated in Mid-Tex and its progeny applies with equal force to the TMDL proposed rule. The Clean Water Act, like the Clean Air Act, contemplates a partnership between EPA and the states,<sup>17</sup> in which EPA is often required to set standards or regulatory requirements which states then implement by regulating individual pollution sources. Thus, as EPA points out, the TMDL proposed rule would not itself regulate any small entities. Indeed, as in the Michigan and American Trucking cases, the TMDL proposed rule would not itself regulate *any* individual sources of pollution, small or otherwise.

Instead, as in both those cases, the TMDL proposed rule would establish requirements for *states* (and territories, Indian tribes, and the EPA) to follow in listing impaired waters and establishing TMDLs. Also as in both those cases, states (and territories, tribes and the EPA) will have discretion over many variables, including which waterbodies to list, how to prioritize such waterbodies, how to schedule the waterbodies for TMDL development, and how to calculate and apportion the TMDLs to individual sources of pollution. Therefore, EPA's proposed TMDL rule no more regulates small entities that might eventually be subject to TMDLs than EPA regulated small entities that might eventually be subject to state implementation plans in the American Trucking decision. As the court stated in the Mid-Tex opinion, in enacting the Regulatory Flexibility Act, “Congress did not intend to require that every agency consider every indirect effect that any regulation might have on small businesses in any stratum of the national economy.” 773 F.2d at 343.

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<sup>16</sup> See id.

<sup>17</sup> Arkansas v. Oklahoma, 503 U.S. 91, 101 (1992) (“Clean Water Act anticipates a partnership between the States and the Federal Government”); Virginia v. EPA, 108 F.3d 1397, 1408 (D.C. Cir.), modified on other grounds, 116 F.3d 499 (D.C. Cir. 1997) (“Clean Air Act creates a partnership between the states and the federal government” (quoting Bethlehem Steel Corp. v. Gorsuch, 742 F. 2d 1028, 1036-37 (7<sup>th</sup> Cir. 1984))).

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Accordingly, we conclude that the case law interpreting the Regulatory Flexibility Act adequately supports EPA's certification that the TMDL proposed rule will not have a significant economic impact on a substantial number of small entities under section 605(b) of the RFA and its resulting determination that it was not required to conduct an initial regulatory flexibility analysis under section 603(a) of that statute.

### THE NPDES PROPOSED RULE

#### EPA's Certification

EPA certified under section 605(b) of the RFA that none of the several new provisions of the NPDES proposed rule would have a significant impact on a substantial number of small entities. EPA's certification is based on: (1) its analyses of the potential costs of the new provisions, and (2) the caselaw it cited in connection with its certification of the NPDES proposed rule. We address EPA's economic analysis in the attached briefing slides.

#### The Offset Provision

One of the provisions of the NPDES<sup>18</sup> proposed rule would require that states ensure that new and significantly expanding dischargers that are large entities on impaired waterbodies offset their discharges by obtaining and maintaining reductions in pollution discharges of more than 1.5:1 from existing dischargers on the same waterbody ("the offset provision"). Because this provision would require offsets only of large entities, EPA concluded that it would not impact small entities under the RFA.

#### The Permit Reissuance Provision

Another proposed provision would authorize EPA to object to and to reissue expired state-issued NPDES permits that have not been reissued following the expiration of their 5-year term, where the permit authorizes discharges into impaired waters or where the permit does not contain limits consistent with the applicable TMDL.<sup>19</sup> EPA characterizes this provision as a proposal to authorize future discretionary action by EPA.

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<sup>18</sup> The Clean Water Act generally prohibits the discharge of pollutants from discrete pipes or "point" sources except pursuant to a permit issued under the National Pollutant Discharge Elimination System (NPDES). See Clean Water Act, §§ 301-302, 502 (12), (14); 33 U.S.C. §§ 1311-1312, 1362 (12), (14) (1994).

<sup>19</sup> Under the Clean Water Act, states with EPA-approved programs may issue NPDES permits to sources of water pollution that discharge pollutants from discrete pipes or "point" sources. See Clean Water Act §§ 402(b); 33 U.S.C. §§ 1342(b) (1994).

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### The Designation Provisions

A final set of proposed provisions would extend EPA's current authority under the National Pollutant Discharge Elimination System to designate and require NPDES permits for certain presently unpermitted sources. The proposal would authorize EPA under certain conditions to require permits for animal feeding operations, aquatic animal production facilities, and silvicultural activities.

With respect to animal feeding operations and aquatic animal production facilities, the current regulations provide that where EPA is the permitting authority, EPA may designate such facilities as point sources requiring NPDES permits if EPA determines they are significant contributors of pollution to waters of the United States. The proposed rule would extend this discretionary designation authority to authorize EPA action in states with approved NPDES programs, but only where the EPA has established the TMDL and designation is necessary to provide reasonable assurance that the TMDL will be implemented.

EPA states that promulgation of the designation provisions involving animal feeding and aquatic animal facilities is only one step in a series of actions that must occur before any costs are imposed on any particular small entity. First, the proposal would authorize EPA action in only a limited set of circumstances: (1) where a state has either failed to submit a TMDL or has submitted a deficient TMDL; (2) where EPA has established a TMDL for the water body; and (3) where EPA determines that the animal feeding or aquatic animal facility is a significant contributor of pollution and that designation (and permitting) of the source are needed to ensure that the TMDL is implemented. Moreover, EPA explains that when and how often it might exercise the proposed authority is unpredictable. Because EPA does not know for which water bodies in which states it will need to establish TMDLs, it cannot predict what animal or aquatic facilities it may need to consider for designation under the proposed authority.

With respect to silvicultural activities, the proposed rule would eliminate the current categorical exemption from NPDES regulation that most silvicultural stormwater sources have. Under the proposal, these sources would continue to be exempt unless and until EPA or a state with an approved NPDES program designated them as subject to NPDES regulation. The currently unregulated silvicultural sources would only be required to obtain NPDES permits (1) on a case-by-case designation by EPA or a state with authority to issue permits and (2) for the purposes of EPA designation, only for sources that discharge to waters for which EPA establishes a TMDL, in order to provide assurance that the TMDL will be implemented.

Concerning the designation provisions involving silviculture, EPA states that while the provisions may at some point in the future impose costs on dischargers, including small entities, promulgation of the provisions giving EPA authority to subject these sources to NPDES permitting requirements does not impose additional costs on dischargers now. Moreover, because the proposed authority is

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discretionary, it is not possible to identify which nonpoint source dischargers, if any, would be designated as point sources and required to obtain a permit. No sources would be automatically so designated. Only in the event EPA or a state acted to designate a particular discharger would there be any costs to the discharger.

#### Legal Analysis

EPA's position that no further analyses were required for the NPDES proposed rule under the Regulatory Flexibility Act is supported by the case law interpreting the RFA. As previously discussed, the pertinent inquiry in determining whether a proposed rule has been properly certified is whether the rule would regulate small entities. *See, e.g., Michigan v. EPA*, No. 98-1497, 2000 U.S. APP. LEXIS 3209 (D.C. Cir. Mar. 3, 2000). None of the provisions in the proposed NPDES rule would themselves regulate small entities. In fact, except for the offset provision, which only applies to large entities, none of the provisions would impose requirements on any entities at all. Instead, both the designation provisions and the permit reissuance provision would expand EPA's regulatory authority to allow future discretionary action by EPA. In such circumstances, the case law holds that certification is proper.

The designation provision and the permit reissuance provision of the NPDES proposed rule are analogous to RFA rule certifications upheld in two federal appellate decisions not cited by EPA. In *Colorado v. Resolution Trust Corp.*, 926 F.2d 931 (10<sup>th</sup> Cir. 1991), plaintiffs had challenged a Resolution Trust Corporation (RTC) regulation formalizing the RTC's interpretation of its authorizing statute as allowing the RTC to override state branch banking laws preventing banks that acquired failed or failing thrifts in emergency acquisitions from retaining and operating the thrifts' offices as bank branches.

In certifying that the rule would not have a significant impact on a substantial number of small entities under the RFA, the RTC stated that "the rule will not impose compliance requirements on depository institutions of any size." Moreover, the certification stated, the rule "imposes no performance standards, no fees, no reporting or recordkeeping criteria, nor any other type of restriction or requirement with which depository institutions must comply. Thus, it does not have the type of economic impact addressed by the RFA." *Id.* at 948.

The court agreed. *Id.* Quoting *Mid-Tex. Elec. Co-op., Inc. v. FERC*, 773 F.2d 327, 342 (D.C. Cir. 1985), the court pointed out that the RFA is meant to address "the high cost to small entities of compliance with uniform regulations," and "the relevant 'economic impact' is the impact of compliance." The RTC rule imposed no regulatory compliance requirements at all. Therefore, according to the court, the certification was proper. *Id.* at 948.

Recently, the Court of Appeals for the Third Circuit determined that the RTC holding was directly applicable to a rule promulgated by EPA denying

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Pennsylvania's request that the EPA redesignate a certain "nonattainment" area in the state as an "attainment" area under the Clean Air Act. Southwestern Pennsylvania Growth Alliance v. Browner, 121 F.3d 106 (3<sup>rd</sup> Cir. 1997). Like the RTC rule, the particular rulemaking at issue in Southwestern Pennsylvania Growth Alliance did not "affect any existing requirements applicable to small entities" nor did it "impose new requirements." Id. at 123.

The court rejected an intervenor's contention that the EPA's denial of redesignation would impact small entities. The intervenor had argued that EPA's disapproval of Pennsylvania's redesignation request would soon result in a "bump up" of the area's nonattainment classification from "moderate" to "severe." This would happen, according to the intervenor, because under the Clean Air Act, areas that failed to attain air quality standards by the applicable date, as this one would, were classified by operation of law to the next higher classification, and that classification would mean stricter pollution control requirements for small entities in the area. Id. at 123-24.

The court disagreed. According to the court, the more stringent controls impacting small entities would result from the rulemaking process that would accompany the reclassification to the higher nonattainment status, not from the rulemaking process before the court in which the EPA denied Pennsylvania's redesignation request. Id. at 124. Therefore, the court concluded, the EPA properly certified that the particular rulemaking at issue in this case would not affect small entities under the RFA.

The RTC and the Southwestern Pennsylvania Growth Alliance cases stand for the proposition that where a rule contains no regulatory compliance requirements at all, no regulatory flexibility analysis is required under the RFA. That proposition applies here. As in both those cases, the designation provisions and the permit reissuance provisions in the NPDES proposed rule impose no requirements on any entities. Instead, as with the rule in the RTC case, which, as noted previously, formalized the RTC's interpretation of its statutory authorization, the proposed designation provisions and the permit reissuance provisions expand EPA's regulatory authority. Moreover, as in the Southwestern Pennsylvania Growth Alliance case, the permit reissuance provisions and the designation provisions can be fairly characterized as proposals to authorize future discretionary action by EPA, and not the current imposition of new requirements.

Accordingly, we conclude that the case law interpreting the Regulatory Flexibility Act adequately supports EPA's certification that the NPDES proposed rule will not have a significant impact on a substantial number of small entities under section 605 (b) of the RFA and its resulting determination that it was not required to conduct an initial regulatory flexibility analysis under section 603(a) of that statute.

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