



## Office of Advocacy

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October 12, 2001

The Honorable Christine Todd Whitman  
Administrator  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Dear Ms. Whitman:

Enclosed for your consideration is the Report of the Small Business Advocacy Review Panel (SBAR Panel or Panel) convened for EPA's planned proposed rulemaking entitled "Effluent Limitation Guidelines for the Construction and Development (C&D) Industry Point Source Category." These regulations are under development by the U.S. Environmental Protection Agency (EPA) under the Clean Water Act, sections 304 and 306. They would control the direct discharge of pollutants to surface waters of the United States by establishing effluent limitation guidelines for businesses that disturb land during construction activity.

The rulemaking addresses two phases of construction project development. The rulemaking would propose storm water discharge requirements for the active construction phase, when projects are actually under construction. In addition, the proposal would contain requirements for the design and installation of post-construction storm water controls.

The schedule for the C&D rulemaking is included in a consent decree between EPA and the Natural Resources Defense Counsel (NRDC). The deadline for the proposal is March 2002 and the deadline for final action is March 2004.

On July 16, 2001, EPA's Small Business Advocacy Chairperson (Thomas E. Kelly) convened this Panel under section 609(b) of the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). In addition to its chairperson, the Panel consists of the Director of the Engineering and Analysis Division of the Office of Science and Technology within EPA's Office of Water, the Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget (OMB), and the Acting Chief Counsel for Advocacy of the Small Business Administration (SBA).

It is important to note that the Panel's findings and discussion are based on the information available at the time this report was drafted. EPA is continuing to conduct analyses relevant to the proposed rule, and additional information may be developed or obtained during this process as well as from public comment on the proposed rule. The options the Panel identified for reducing the rule's regulatory impact on small entities will require further analysis and/or data collection to ensure that the options are practicable, enforceable, protective of public health, environmentally sound and consistent with the Clean Water Act.

### Summary of Small Entity Outreach

EPA has actively involved stakeholders in the development of the proposed rule in order to ensure the quality of information, identify and understand potential implementation and compliance issues, and explore regulatory alternatives. EPA conducted six focus group meetings with the home building

industry over the past two years and, in the process, received direct input from developers and builders about the impacts of the proposed rule on the industry.

In the past two years, EPA held conference calls with large and small builders and developers from around the country to improve our understanding of the C&D industry, especially from an economic and business perspective. Prior to convening the Panel, EPA held a conference call/meeting on June 14, 2001 to receive information from prospective small entity representatives (SER) about plans for convening the Panel and their early concerns about the planned proposed regulation. EPA invited seven residential builders and developers, five heavy construction company representatives, one local government official, one trade association representative, and five consultants to serve as potential SERs during the pre-panel outreach process. The full Panel report lists the materials provided to them and summarizes their comments. Their full written comments are also attached. In light of these comments, the Panel considered the regulatory flexibility issues specified by RFA/SBREFA and developed the findings and discussion summarized below.

### Panel Findings and Discussion

Under the RFA, the Panel is to consider four regulatory flexibility issues related to the potential impact of the rule on small entities (i.e., small businesses and municipalities):

1. The type and number of small entities to which the rule will apply.
2. Record keeping, reporting and other compliance requirements applicable to small entities.
3. The rule's interaction with other Federal rules.
4. Regulatory alternatives that would minimize the impact on small entities consistent with the stated objectives of the statute authorizing the rule.

The Panel's most significant findings and discussion with respect to each of these issues are summarized below. To read the full discussion of the Panel findings and recommendations, see Section 9 of the Report.

### Number and Types of Entities Affected

Based on the 1997 Census of Construction, a Harvard University study of the housing industry, and information from literature and the trade associations, EPA believes that as many as 148,000 establishments may be performing activities that would be covered by the forthcoming C&D proposed rule. However, only about 20,000 storm water permits have been issued under Phase I NPDES Storm Water Regulations. This annual permit level will increase somewhat when the Phase II NPDES Storm Water Regulations become effective in 2003, but EPA staff are continuing to develop an estimate of affected entities that is consistent with both the Census and permit activity data. Some of these establishments may not be covered by the effluent limitation guidelines; they perform construction on projects that disturb less than one acre of land per year and that are not part of a common plan of development. Several SERs noted that the C&D industry is composed mostly of small businesses. In the residential sector, most of these firms build less than ten houses per year.

### Potential Reporting, Record keeping, and Compliance Requirements

The small entity representatives commented that the problems with the effectiveness of existing erosion and sediment control requirements are not the lack of standards but the lack of adequate implementation and enforcement, including education, bid solicitation and evaluation, proper design, installation, and maintenance of best management practices (BMPs), and inspection. One SER cited a recent study, ***Construction Practices: The Good, The Bad and the Ugly*** which found that contractors are not following good installation and maintenance practices, and recommended more inspection and education be instituted to remedy the problems, instead of additional substantive

regulatory requirements.

The Panel agrees that implementation of erosion and sediment controls is difficult due to many factors, including lack of knowledge of appropriate technologies and applicable requirements by subcontractors and lack of regular maintenance by the owner/operator. The Panel recommends that EPA continue and expand its efforts to provide information and assistance to both the regulatory and the regulated community in understanding and implementing the existing storm water program, as well as any new requirements that may be included in the effluent guidelines. The Panel further recommends that in fashioning the effluent guidelines, EPA strives to maintain site-specific flexibility that is the strength of the current program, while enhancing accountability to ensure that effective BMPs are implemented and maintained.

### Related Federal Rules

Given the existence of federal storm water permit rules and related State and local requirements that address the construction industry storm water discharges, the Panel devoted considerable discussion to the potential overlap that the C&D proposal may have with other EPA regulations. In 1990, EPA issued the Phase I NPDES Storm Water Regulations that cover construction sites five acres or larger; smaller sites included in a larger common plan of development (e.g. a subdivision) are also covered. In 1999, EPA issued the Phase II NPDES Storm Water Regulations that extended the permit coverage to sites one acre or larger. Pursuant to the Phase I regulations, EPA and the States issued construction general permits (CGP) beginning in 1992. These permits require businesses to prepare storm water pollution prevention plans, but do not require use of particular controls or technologies. The Agency and the States are revising the permits to incorporate the Phase II requirements by 2003.

In addition to the CGP, EPA and the States have issued storm water system permits to large municipalities pursuant to the Phase I regulations and are in the process of implementing Phase II permits to smaller municipalities. The municipal permits require the operation of local storm water management programs that include oversight of construction activities. The States and local jurisdictions also issue regulations and permits independent of Federal rules.

The SERs expressed concern over the complexity of overlapping and/or inconsistent Federal, State, and local storm water regulations and the difficulties small businesses have in understanding them. Many SERs reminded the Panel that erosion and sediment control and post-construction storm water management for new development activities are already covered by the existing Federal NPDES Phase I and Phase II Storm Water Regulations, although Phase II regulations have not yet gone into effect and the Phase I regulations have not been in effect long enough for their effectiveness to be fully evaluated. These SERs questioned whether it was appropriate to be considering additional Federal storm water regulations at such an early stage in the implementation of these existing programs.

The Panel appreciates this concern expressed by the SERs. The Panel notes that it is the goal of the effluent guidelines program to evaluate the technologies that are being selected for compliance with the Phase I regulations and eventually the Phase II construction site erosion and sediment control and post construction storm water management requirements and the efficacy of applying a BAT technology standard nationwide in a manner which allows for appropriate selection of additional controls based on site conditions. As part of the effluent guidelines cost and benefits analysis, EPA will evaluate the effectiveness of controls that will be used to comply with Phase I and Phase II regulations (baseline) as well as evaluate the incremental costs and benefits of the additional technology-based standards.

The Panel believes there may be some confusion on the part of SERs over the relationship between NPDES permitting requirements and effluent guidelines. The Phase I and Phase II regulations identify who must obtain permit coverage, and discuss generally what areas (e.g., sediment and erosion control, post construction runoff control) should be addressed in the permit requirements. They do not specify technology options, the selection of which are left to the best professional judgement of the permit writer. In the case of storm water permits for construction, virtually all sites are covered by general permits, which require preparation of a storm water pollution prevention plan, but contain no

technology requirements. Effluent guidelines, in contrast, establish national performance standards, based on best available technology economically achievable, that each permit must include. In many industries, these may actually streamline the permitting process by providing a nationally consistent basis to permit writers on what the appropriate technology options are and the required limitations in the permit. Thus, there is no inherent duplication in adopting effluent guidelines for an industry that is already covered by permitting requirements. In fact, by definition, all effluent guidelines apply to point sources already covered by the NPDES program.

In this context, the Panel recommends that EPA, during the development of the proposed effluent guidelines, evaluate the adequacy of the current Phase I and II program. The Panel also recommends that EPA proceed with the development of proposed effluent guidelines, but that in doing so, keep open the option of ultimately declining to promulgate final guidelines until the effectiveness of Phase I and Phase II, without national effluent guidelines, can be more fully evaluated.

The Panel further recommends the inclusion in the proposal of regulatory language that would provide a mechanism by which construction sites could meet the effluent guidelines requirement by complying with State and/or local regulations that provide a comparable level of environmental protection. The Panel also notes and endorses EPA's intention to incorporate any additional requirements for erosion and sediment control and storm water management developed under the effluent guidelines into the existing construction general permitting system, which should ease the regulatory burden associated with the new requirements, at least in terms of permitting and related paperwork costs.

### Regulatory Alternatives

Many of the SERs commented that quantitative or numerical effluent standards are not appropriate for storm water discharges. Another SER indicated that numeric limits are unproven in a construction discharge context and are extremely cost-ineffective. Another SER noted the special challenges involved with sampling of storm water and indicated that in his extensive experience with such sampling, three to five attempts were often necessary in order to obtain a single usable sample and that the cost of two usable samples could exceed \$10,000. He characterized nationally imposed storm water sampling as a costly ,nightmare, for both the regulated community and the regulators. The Panel generally agrees with the SERs and noted that EPA had considered monitoring when developing the general permit. During development of the general permit, EPA had concerns about the transient nature of construction activities and the cost to industry, and concluded that inspection requirements can be as or more effective than monitoring discharges for evaluating compliance with permit conditions. The Panel recommends against establishing across-the-board storm water monitoring requirements as part of the effluent guidelines.

The Panel would urge EPA, as it conducts evaluations of the feasibility of establishing numeric effluent limitations to comply with the settlement agreement with NRDC, to fully consider the many challenges associated with developing numeric effluent standards, such as monitoring difficulties, site-specific variability, and the stochastic nature of rainfall and runoff events. The Panel recommends that EPA acquire and evaluate data on both costs and effectiveness of such requirements from sites across the country, reflecting a variety of geographic, weather, soil, and other site conditions, before it makes any determination on the utility and feasibility of such standards. The Panel also recommends that any BMP certification requirements that may be included in the guidelines be limited to design parameters only and not include performance certification or liability of the certifier for failure of BMPs to perform as expected.

Several SERs commented that requiring post-development runoff equal to pre-development levels is unreasonable. One SER specifically indicated this standard may not be practical or economically feasible to achieve in many situations and could actually be detrimental to the environment. @ Other SERs noted that such a requirement could interfere with local land use decisions. As noted above, the Panel believes it important than any requirements relating to post-development runoff control be flexible enough so as not to result in any such interference. The Panel recognizes that EPA is specifically required to evaluate regulatory options that limit post-construction runoff based on pre-existing conditions under its settlement agreement with the NRDC. Post-development peak runoff flow

rates often require control to pre-development levels in order to prevent downstream flooding. Many States and localities already address this need to varying degrees in existing programs, some of which may use a site-specific waiver approach. The Panel recommends that EPA fully evaluate the feasibility and cost effectiveness of various BMPs in maintaining post-development runoff volume, flow rate and pollutant loadings to pre-development levels. However, specific BMPs should be included in a menu format rather than as across-the-board requirements, so as not to limit local flexibility in land use planning.

Several SERs expressed concern over potential adverse impacts of BMPs designed to maintain pre-development infiltration conditions. They noted that use of swales and open ditches could contribute to pollution of underwater aquifers (e.g., by pesticides), sinkhole formation or undermining of basement foundations. Further, BMPs that increase the amount of standing water near residential properties may raise various public health and safety issues. While the Panel agrees that these are important concerns, they may be limited to specific site conditions and may be avoidable in many cases through appropriate design and maintenance of BMPs. The Panel recommends that EPA fully consider the potential for infiltrative BMPs to result in increased risk of groundwater contamination as it develops a menu of possible measures, and to the extent possible, identify the situations in which such measures should and should not be used and appropriate practices for minimizing such risk. The Panel also recommends that EPA fully consider all of the potential adverse impacts of infiltrative BMPs and only include such measures in a menu-based approach with sufficient flexibility to allow these concerns to be addressed on a site-specific basis at the local level, through proper selection, design, maintenance, and inspection of appropriate measures.

Several SERs suggested that EPA base the effluent guidelines on the existing CGP requirements. Such an option may provide additional economically achievable environmental benefits above the current baseline. The Panel agrees that such an approach is worth exploring. It would provide a uniform set of requirements for preparing storm water pollution plans but would not impose uniform technology requirements on all sites. This might facilitate a site-specific approach with enhanced accountability while minimizing the additional complexity and permitting delays that may be associated with the implementation of new effluent guidelines because many regulated entities, regulators, and consultants are already familiar with the requirements of the CGP. The panel recommends that EPA give consideration to this approach. At a minimum, EPA should present it for comment in the preamble to the proposed effluent guidelines as a regulatory option under consideration.

### Methodological Issues

Several of the SERs commented that EPA's baseline for technology and costs, as

presented to SERs in its preliminary cost estimate of regulatory options, is not accurate and assumes a higher level of control than is actually occurring or required. They are concerned that such an assumption overestimates baseline costs, and subsequently underestimates the incremental costs required to comply with EPA's technology options. Instead of EPA's incremental cost of up to \$100/acre, one SER estimated that the incremental cost would be much higher. Another SER attached comments from a consulting engineer suggesting that EPA may have overestimated some costs, such as those for silt fences, diversion dikes and post-construction storm water management and flood control measures.

EPA has used the economic analysis from the Phase II rulemaking as the basis for its assumptions regarding baseline costs and technology requirements. The Panel believes EPA has made a reasonable preliminary attempt in a limited time frame to estimate these costs. At the same time the Panel believes that some of the concerns raised by the SERs are well founded and notes that according to EPA's preliminary analysis of capital and infrastructure costs of one site size (7.5 acres) and one land use (low-density residential), incremental costs for the most stringent soil and erosion control option are only 5% of baseline costs, and net incremental costs for the most stringent post-construction runoff control option are actually negative. The Panel finds this result surprising and worthy of further evaluation. The Panel recognizes that establishing an appropriate baseline presents significant analytical challenges, especially when some of the baseline costs are associated with requirements

that have not yet been implemented for a portion of the industry (i.e., Phase II sites). However, establishment of an appropriate baseline is critical in order to properly reflect the incremental costs of the regulatory options. The Panel understands that in establishing an appropriate baseline for erosion and sediment control usage, EPA is relying on the Phase I and II NPDES storm water regulations, the EPA construction general permit, and an evaluation of existing information on state and local requirements. This is appropriate since, following implementation of the Phase II regulation in 2003, most construction activities over 1 acre will be required to implement a storm water pollution prevention plan and install appropriate erosion and sediment controls on their site. However, based on SER comments and the Panel's own concern with the incremental cost estimates in EPA's preliminary analysis, the Panel believes that EPA needs to reevaluate its cost estimates and revise them as appropriate. The Panel recommends that EPA fully evaluate the appropriateness of the selected baseline requirements and the estimated costs, and the regulatory requirements and their costs in the development of the proposed rule. The Panel further recommends that EPA specifically consider the comments of the SERs in this effort.

In reviewing EPA's draft Baseline Assessment of Environmental Impacts, several SERs raised concerns with EPA's loadings estimates that the Panel believes may have merit. One SER noted that EPA's baseline loadings estimates are extremely low and that these are not consistent even with estimates contained elsewhere in the Baseline Assessment document. As in the case of costs, the Baseline Assessment is important because it serves as the benchmark against which loadings reductions attributable to the effluent guidelines are measured. The Panel notes that the Baseline Assessment is a preliminary analysis and that several peer reviewers also raised significant concerns. The Panel recommends that EPA carefully reevaluate this assessment, and assure that the final baseline assessment is both internally consistent, and consistent with other published data, particularly since there is wide variation in reported erosion rates.

The Panel notes that EPA has not yet developed loadings reductions estimates for any of its regulatory options. However, the Panel is aware that as EPA develops the effluent guidelines, it will need to determine pollutant removal efficiencies for the BMPs under consideration. The Panel notes that there is currently a limited amount of data on which to base such quantified loadings reductions estimates. The Panel endorses this effort and recommends that EPA obtain the best data possible on BMP effectiveness before it attempts to quantify the loadings reductions that may be expected from the proposed regulatory options.

Sincerely,

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