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Sewerage Agencies

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January 10, 2002

Kevin Weiss  
U.S. Environmental Protection Agency  
Office of Wastewater Management, Water Permits Division  
1200 Pennsylvania Avenue, NW  
7<sup>th</sup> Floor, ICC Building, Mail Code: 4203M  
Washington, DC 20460

Dear Kevin:

The Association of Metropolitan Sewerage Agencies (AMSA) appreciates the opportunity to provide comments to the U.S. Environmental Protection Agency (EPA) on the Office of Water's Draft Blending Policy (entitled *Wet Weather Treatment Scenarios at Publicly Owned Treatment Works*), as it appears in the larger December 21, 2001 draft wet weather guidance. The Office of Water (OW) is to be commended for taking steps to issue a final blending policy in an attempt to provide greater consistency among Region and state permit and enforcement authorities with respect to authorizing blending practices at publicly owned treatment works (POTWs).

AMSA believes that a final blending policy is critical as many EPA Regions and states have steadfastly ignored the OW's previous blending interpretation (as described in the March 7, 2001 letter from Diane C. Regas to Congressman Bill Frist). The Association encourages OW to move forward with the issuance of a final blending policy with the modifications suggested in this letter.

### **Blending: A Critical Tool for Treating Peak Wet Weather Flows**

The use of blending is absolutely essential for many POTWs to treat wet weather flows and still meet secondary effluent limitations. A recent survey of AMSA members found that a large number of members utilize a blending process during peak flow conditions. Blending enables POTW operators to maximize the amount of wet weather flow that can be treated while fulfilling their important obligation to protect the plant from property and treatment process damage.

During wet weather conditions, the treatment plant receives and must treat flow volumes which are many times greater than dry weather flows. Collection systems and plants were not designed to store and treat this excess flow, and it would be both

inefficient and technologically infeasible to redesign these facilities to accommodate all wet weather conditions. Thus the POTW is placed in a no-win situation. If the operator decides to force more flow through the plant than it is designed for, he/she risks biological washout and extended treatment process failure. If the operator decides to protect the plant and not accept additional flow, he/she risks increased overflows from the collection system, basement flooding, and a potentially significant bypass around the entire treatment process. Other options, such as wet weather treatment facilities, do not provide the same level of treatment as that available at a POTW. For these reasons, blending has always been used as a reasonable means for enabling POTWs to provide treatment to wet weather flows that achieves discharge standards and protects the plant processes.

### **AMSA Survey Confirms Widespread Use of Blending**

In January 2001, AMSA conducted a member-wide survey to determine the current extent of blending as a treatment practice. AMSA received 122 responses (47 % of the membership). The survey defined “blending” as the “diversion of wastewater flows around one (1) or more treatment processes, followed by the recombination of the diverted flows with the flows that have undergone full treatment, and by the subsequent disinfection of the recombined flows prior to discharge to meet effluent limits.”

The following is a summary of the survey responses:

- (1) 50 percent of respondents operate plants that are designed to blend peak flows.
- (2) Among the 50 percent of plants designed to blend, 70 percent indicated that the plant was originally designed to blend, while the remaining 30 percent were redesigned to blend.
- (3) Among the 50 percent of plants designed to blend, 31 percent indicated that their permit specifically authorized the use of blending.
- (4) Among the 50 percent of plants designed to blend, 33 percent responded that they had included information relating to the plant’s blending facilities in prior permit applications.
- (5) Among the 50 percent of plants designed to blend, 82 percent responded that they received state or federal funds to construct blending facilities as part of the plant.
- (6) If the practice of blending was subsequently prohibited, the following outcomes are anticipated by respondents:
  - a. Bypass of raw sewage from headworks (33 percent);
  - b. Surcharging in the collection system (30 percent);
  - c. Basement flooding (15 percent);
  - d. Washout of biomass and solids from treatment facility (41 percent); and/or
  - e. Decreased treatment efficiency and possible exceedance of permit limits (46 percent).

### **AMSA's General Comments on Draft Blending Policy**

In general, AMSA believes that the Agency is on the right track with its draft blending policy. We agree that the ultimate objective for POTWs during wet weather conditions is to meet secondary treatment standards and to protect the plant from wash-out and other types of wet weather-related damage. In accordance with this objective, the operator should continue to have the flexibility to change the treatment plant's internal process flows as necessary. AMSA believes that the draft blending policy strikes an appropriate balance between these objectives, and affords the needed operational flexibility to maximize treatment. There are, however, certain areas where the draft policy should be strengthened and clarified prior to finalization. The recommended modifications below capture the comments submitted to AMSA by its members. All comments are directed at the Agency's document entitled *Current Thinking on Peak Flows at POTWs* (January 19, 2001), and are organized in accordance with the document's sections.

### **Specific Comments on Draft Blending Policy**

AMSA recommends that EPA clarify that the policy applies to a POTW regardless of whether the particular collection system is combined or separate. The draft policy does not state whether the principles apply to both combined and separate systems, although the use of blending is appropriate for both types of systems. We believe the Agency's intent was to include both types of systems, and this issue should be clarified to avoid confusion.

AMSA also suggests that the use of terms such as "generally accepted practices and design criteria" (Principle # 2) and "generally accepted good engineering practices and criteria" (Principle # 4) should be clarified through guidance. For instance, it is not clear in the draft policy which entity will make the subjective determination of what qualifies as "generally accepted." AMSA understands that EPA is in the process of developing guidance to provide further clarification on how these terms are intended to be applied in the field. AMSA requests the opportunity to review and provide comments on this guidance when it is released as a draft.

### **Introductory Paragraph # 1**

AMSA notes that POTWs use blending during certain peak flow events to protect not only biological units, but other units as well from damage. Therefore, we recommend the second sentence of the first paragraph be revised to reflect this broader use of blending as follows:

"Peak wet weather discharges from POTWs that are comprised of effluent routed around ~~biological~~ **one or more** treatment units together with the effluent from the biological units prior to discharge could be approved ... ."

### **Principle # 1**

AMSA believes that this principle is reasonable as drafted.

### **Principle # 2**

AMSA recommends the following revisions:

The NPDES permit application, ~~and~~ ***amendments thereto, and/or other documents*** from the POTW provide notice of, ~~and the permit specifically recognizes~~ the treatment ~~scheme~~ ***methodology*** that will be used for peak flow management. The treatment ~~scheme~~ ***methodology***, including designed capacity of various units, should be consistent with generally accepted practices and design criteria. ***The final combined flow for discharge to the receiving water*** must be ~~and~~ designed to meet ~~under the specified treatment scenario~~ effluent limitations based on the secondary treatment regulation and/or any more stringent limitations necessary to meet water quality standards.

### **Principle # 3**

Several members were concerned about the practical implications of requiring the exceedance of capacity in these various units as a precursor to using blending. Members cautioned that EPA should avoid any implication of requiring facilities to either have or build new storage or equalization facilities as a prerequisite to authorizing blending. One state has already taken this step, and is attempting to require, consistent with its interpretation of draft Principle # 3, that a facility now build storage facilities to avoid the need for blending, even though the plant had long ago been designed for blending. When asked to specify the capacity to which these facilities should be designed, the state responded that it would inform the POTW when the capacity was sufficient. AMSA understands that the trigger to blend in most facilities is more dependent on the status of the secondary microorganisms than on strict hydraulic capacity. Therefore, AMSA recommends that Principle # 3 be amended as follows to provide greater flexibility in allowing operators to blend in order to protect the biological treatment facilities of the plant:

Alternative flow routing scenarios are only used when flows exceed the capacity of storage/equalization units ~~and~~ ***or*** biological treatment units, ***or when flows would endanger the continued health and proper function of the biological processes of the plant.*** ~~based on generally accepted good engineering practices and criteria as defined in the permit.~~

### **Principle # 4**

AMSA believes that this principle is reasonable as drafted.

### **Principle # 5**

This principle does not adequately account for multi-jurisdictional issues. As is the case with many wastewater treatment agencies, large portions of the collection system are owned by separate and distinct

local governments. The draft policy should be revised to accommodate systems with multiple jurisdictional entities. AMSA recommends the following revision:

The permit contains requirements for the collection system *under the jurisdiction of the permittee*, including at a minimum, that the permittee properly design, operate, and maintain its collection system and, for permittees that own or operate combined sewers, conditions that conform to the 1994 Combined Sewer Overflow (CSO) Control Policy.

### **Introductory Paragraph # 2**

AMSA recommends the following revision to paragraph 2.

Peak wet weather flows that are routed around ~~biological~~ *one or more* treatment units of the POTW that do not meet the criteria listed above are considered prohibited bypasses under the bypass regulation at 40 CFR 122.41(m) unless they otherwise meet the criteria provided in the bypass provision. Under the NPDES regulations, all NPDES permits are required to contain a prohibition on bypasses consistent with 40 CFR 122.41(m).

### **Additional Considerations**

#### **Consideration A**

AMSA suggests that greater clarification is needed on what is intended by “compliance monitoring appropriate for the treatment scheme ... .” Several members indicated that if this provision refers to what is typically required for compliance monitoring at the final discharge point, then this requirement would be reasonable.

#### **Consideration B**

Several members were concerned about the feasibility of conducting water quality monitoring during peak flow events. AMSA suggests that guidance be developed regarding the Agency’s expectations on how to assess water quality impacts during peak flow events.

#### **Consideration C**

AMSA requests clarification on EPA’s intentions with regard to this provision. Does this consideration refer to the general criteria discussed in Principles # 4 and #5?

### **CLOSING PARAGRAPH**

AMSA recommends the following revision:

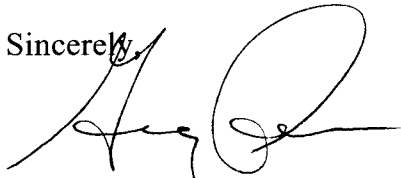
The principles described above do not address NPDES permit requirements for discharges from facilities other than POTWs, portions of flows that do not receive at least primary treatment *or equivalent thereto*, or the treatment of flows resulting from dry weather conditions.

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AMSA appreciates EPA's consideration of the above comments. We would be happy to meet with staff to discuss AMSA's recommendations further. Please contact me at 202/296-9836 or [gschaner@amsa-cleanwater.org](mailto:gschaner@amsa-cleanwater.org) if you should have any further questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Greg Schaner', with a large, stylized loop at the end.

Greg Schaner

Director, Government Affairs