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Jamie Piziali  
Water Permits Division  
Office of Water  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave, NW  
Washington, DC 20460  
Via [www.regulations.gov](http://www.regulations.gov)

**Re: Docket No. EPA-HQ-OW-2018-0420, Stakeholder Input on Peak Flows Management**

Dear Ms. Piziali:

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to provide input on EPA's development of a Peak Flows Management Rule (83 FR 44623). NACWA represents the interests of over 300 of the nation's publicly owned wastewater treatment agencies, serving the majority of the sewered population in the U.S. NACWA members are on the front lines of public health and environmental protection. For decades, NACWA's members and clean water utilities nationwide have managed peak wet weather flows to protect their treatment facilities, public health, and the environment. NACWA and its members have been the leading national voice on this issue for public clean water utilities over the last 25 years.

Treatment plants are designed to operate differently in wet weather conditions than in dry weather conditions, and blending is often an effective part of the wet weather design. Blending is a sound engineering practice that has been widely used for decades to maximize treatment of wet weather flows and to ensure that a POTW's permit limits are met. It reliably protects public health and the environment by helping to prevent basement backups and sanitary sewer overflows (SSOs), since it allows for more wet weather flows to receive treatment at the plant rather than being released untreated from the upstream collection system. As part of the overall design of a treatment plant, blending improves the resiliency of POTWs by protecting the biological treatment units – which could take weeks to recover and provide required treatment after peak flows are pushed beyond safe limits – while increasing the total amount of wastewater receiving treatment.

EPA authorized and approved the permitting of blending for many years. The Agency did not consider blending a bypass until after a policy change was proposed in 2005 that would have

treated blending as a bypass<sup>1</sup>. However, this policy change was never finalized and the 2013 8<sup>th</sup> Circuit Court of Appeals decision in *Iowa League of Cities v. EPA* stated that EPA was illegally applying the 2005 policy as a rule even though it was never properly promulgated. The court also found that the CWA's secondary treatment effluent limitations apply only at the final point of discharge, not within a POTW's internal treatment processes. Although EPA has only acknowledged application of this decision within the 8<sup>th</sup> Circuit, NACWA believes that EPA should apply this decision nationwide, as recommended in the Association's previously submitted comments on regulatory improvement (Docket ID EPA-HQ-OA-2017-0190).

Since EPA has expressed concerns about a blanket application of the 8<sup>th</sup> Circuit decision and has chosen to address the blending issue with a rulemaking, EPA should ensure that the rule or any other EPA action is consistent with the 8<sup>th</sup> Circuit decision and with EPA's actions related to blending prior to the proposed 2005 policy. To do this, any EPA action on blending must recognize the following two principles:

1. Blending is not a bypass when it is part of the designed operation of the treatment plant, protects the biological treatment processes, and is designed to meet all discharge permit limits; and
2. Compliance with all permit requirements is determined at the final discharge point, and not at any point within the treatment plant.

Providing clarity on these two principles – whether through a rulemaking or other means – will allow POTWs to make investments in their facilities to improve peak wet weather flow treatment and better protect public health and the environment. POTWs will be much less likely to make these investments if there is uncertainty about their acceptance during each permit renewal.

Any action by EPA on blending should provide maximum flexibility for POTWs to pursue treatment processes for peak wet weather flows that are consistent with the designed operation of their treatment facilities and that best reflect the specific needs of their receiving waters. Since the early days of EPA's work to outline the requirements for secondary treatment – the technology-based standards of the CWA – the Agency has recognized that requirements to address pathogens in wastewater effluent should be guided by local water conditions, through water quality standards. Promulgating a national rule that limits flexibility to address local water conditions would be inconsistent with this approach and would contradict the clear mandates in the CWA. POTWs are currently facing enormous costs to repair and replace aging infrastructure, as well as regulatory requirements related to all aspects of the wastewater treatment process – costs that are ultimately borne by ratepayers. Treatment of peak wet weather flows is only one of the many costs that POTWs must consider and each community must evaluate the appropriate level of investment for peak flow treatment within this broader context.

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<sup>1</sup> At EPA's request, NACWA worked with the Natural Resources Defense Council (NRDC) to develop an alternative blending policy, which EPA used as the basis for the 2005 proposed policy. Since the policy was never finalized but was implemented by EPA in a manner inconsistent with the intent behind the proposal, NACWA no longer supports the 2005 proposed policy.

NACWA's responses to the specific questions asked by EPA regarding peak flow management are below.

**What strategies have you found to be successful in reducing peak flow volumes at the POTW treatment plant?**

Clean water utilities reduce peak flow volumes primarily by reducing infiltration and inflow (I/I) into the collection system, performing other collection system improvements, and/or adding storage for peak flows. These methods can be successful in reducing peak flows, but I/I cannot be completely eliminated, and utilities must decide how much to invest in peak flow reduction versus other infrastructure needs. Each utility must be able to develop a peak flow reduction and treatment plan that is affordable for their rate-payers, with priority placed on projects and strategies that result in the greatest environmental and public health benefits. For most utilities, I/I reduction will be just one part of an overall strategy for peak flow management, since I/I reduction alone is not sufficient. Additional strategies – which may include blending and/or storage – are also necessary. An overall strategy is needed to build resiliency due to the dynamic nature of wet weather events, the increasing frequency and intensity of storm events, and other climate change impacts.

In many cases, treatment plants where blending may be an effective wet weather management strategy can be serving dozens of upstream communities with their own sewer systems. In such cases, accomplishing I/I reduction can be hampered by long-standing contracts or other legal arrangements that can make meaningful reduction a long-term strategy, and peak flow blending may be the best interim strategy for managing wet weather flows.

**What permitting or other regulatory approaches are you aware of that in your opinion provide a good basis for any rulemaking in this area?**

Many states already authorize blending through the permitting process. By providing clarity on the two principles stated above – that blending is not a bypass and that compliance is determined at point of discharge – EPA can allow states and permit writers to determine any conditions for blending that are appropriate for their state and for individual POTWs. Allowing a multi-faceted approach to managing peak flows provides utilities the tools they need to reduce SSOs and protect public health.

Missouri provides a good example of a state that uses these principles to permit blending under certain conditions: the permittee has a capacity, management, operation, and maintenance (CMOM) program for the collection system; samples are collected for Total Suspended Solids (TSS) and Carbonaceous Biochemical Oxygen Demand (CBOD) on days when blending occurs; and blended flows are disinfected during the recreational season.

**What treatment technologies have POTWs with separate sanitary sewer systems used successfully to manage peak excess flows during wet weather? How effective are these technologies at meeting effluent limitations? What are examples of technologies addressing other pollutants not typically subject to discharge requirements in NPDES permits (e.g. pathogens)? Related to these questions, do you have supporting treatment efficacy data that you would be willing to share with EPA for this rulemaking?**

POTWs have used a variety of methods for managing blended flows, all of which are capable of meeting effluent limitations. NACWA members have indicated that flows diverted around secondary treatment generally receive at least primary treatment and disinfection, and some POTWs use advanced treatment technologies such as chemically enhanced primary treatment and physical-chemical treatment. NACWA members have reported that these alternative treatment trains can result in improved effluent quality during wet weather events, when compared to biological treatment, since biological systems can be stressed during these events and conventional biological treatment is not as well-suited for the dilute nature of peak flows.

Regardless of the management method used, POTWs that use blending are designed based on specific criteria to ensure they meet all permit limits. While POTWs may employ technologies or treatment methods that may incidentally address pollutants not specified in their permits, utilities must design their peak flow treatment facilities to meet the requirements in their NPDES permits.

**What are your specific suggestions regarding conditions that could be included in NPDES permits to allow diversions of some peak flows around biological treatment units to protect the treatment plant? Considerations could include:**

- **What information might the NPDES permitting authority need in order to determine whether such diversions are necessary to protect the treatment plant?**

As stated above, a clarification from EPA that blending is not a bypass and that compliance is determined at the point of discharge will allow permitting authorities to allow blending as part of the overall plant design when peak flows may exceed the treatment capacity of the biological treatment units. The permitting authority must recognize that it is not practical to treat all flows through biological processes during wet weather events, since doing so can be detrimental to the health of the biological process and its ability to treat wastewater both for the short term and long term. In addition to protecting the treatment plant, blending also helps to prevent basement backups and SSOs.

Permitting authorities must also recognize that POTWs should not be required to maximize the flow routed through biological treatment before beginning to re-route flow to the alternate wet weather treatment process. The decision to re-route flows and provide alternate treatment requires judgment and real-time decisions that consider multiple variables and are based on weather forecasts and other environmental conditions.

Treatment plant considerations include the health of the biological process at the time, current system in-line storage capacity (if available), current mechanical condition of the collection system and treatment plant, and risk of harm to treatment processes that might degrade future effluent quality. Weather forecast considerations include the duration and severity of the wet weather event, rain amount and intensity over different areas of the collection system, and time of the event relative to diurnal flow. Environmental factors such as the receiving stream conditions and how soil conditions have been affected by previous wet weather events are also critical considerations.

- **Should the number of times such diversions are permitted to occur be limited or reported?**

The number of times diversions around secondary treatment should not be limited if the treatment plant is operating as designed for wet weather flows and meeting applicable discharge limits. As explained above, the POTW must decide, based on a variety of factors, the appropriate time to begin re-routing flows around the biological treatment units. In addition to these factors, the varying weather conditions from year to year and potentially changing climate conditions make it impossible to predict how frequently a POTW might use blending to manage peak flows each year. POTWs can report blending events on their discharge monitoring reports (DMRs), and this is the only reporting needed if permit limits are being met.

- **Are there any requirements that should be considered for ensuring that the treatment plant is operated and maintained in an effective manner to minimize the number of peak flow diversions that occur?**

If a POTW is operating the treatment plant as designed and permit conditions and limits are being met, then additional requirements are not necessary.

- **What requirements would be appropriate for ensuring that maintenance of the collection system to minimize the introduction of stormwater into the sanitary system through inflow and infiltration is occurring?**

As explained above, each POTW must decide the appropriate level of investment in I/I reduction versus other infrastructure investments. This investment balance will vary from utility to utility based on unique factors and considerations. Although EPA should not establish requirements for I/I reduction, continued use of CMOM programs is appropriate.

- **What monitoring and reporting requirements would be important to demonstrate that applicable effluent limits are still being met?**

Monitoring requirements should be tailored to each POTW and its receiving water, with consideration given to how the monitoring information will be used, the cost of obtaining the information, and other practical implications. Since obtaining samples during inclement weather and peak flow events can be challenging, a sampling plan should not be designed to simply collect more samples, but to collect relevant data that is representative and provides meaningful information on impacts to water quality. It is also critical that the monitoring data collected during peak flow events only be evaluated based on receiving water conditions occurring during wet weather blending events, and not on dry weather conditions.

- **How may the permit ensure that public and ecological health is protected?**

Permits that allow blending as part of the overall plant design protect public and ecological health by preventing basement backups and SSOs and by maximizing the volume of flow that

receives treatment at the plant. The permit limits should be set to protect human health and the environment, using scientific evaluations of risk. Perceptions about risks associated with pathogens or other contaminants, absent a data-based evaluation of risk posed by all sources, should not be used as a basis to set permit conditions or restrict blending. If there is scientifically valid data demonstrating a concern about pathogens, this should be addressed through the water quality-based requirements of the CWA and appropriate water quality requirements in discharge permits – not by trying to limit or dictate blending practices through technology-based permit requirements.

Thank you for your consideration of these comments. NACWA looks forward to continued engagement with EPA as this process moves forward. If you have any questions, please contact me at [cfinley@nacwa.org](mailto:cfinley@nacwa.org) or 202-533-1836.

Sincerely,

A handwritten signature in black ink that reads "Cynthia A. Finley". The signature is written in a cursive style with a large initial "C".

Cynthia A. Finley, Ph.D.  
Director, Regulatory Affairs