Peak Wet Weather Flow Management
Final Position Statement

I. Issue Statement

The U.S. Environmental Protection Agency (EPA) announced in April, 2018 that it was beginning a rulemaking to develop a *Peak Wet Weather Flows Management Rule.* EPA currently has a bypass rule for emergency situations in place that allows wastewater utilities to legally bypass secondary (biological) treatment processes when wet weather event flows exceed the capacity of the treatment plant and risks damage to the treatment process. The bypassed water is then "blended" back in with secondary treatment effluent for disinfection prior to discharge. That being said, the practice of "blending" at wastewater systems that treat for sanitary sewer overflows may present some public health challenges, particularly from pathogens. The risks tend to be acute rather than chronic. Various technologies are being employed to treat the effluent and understanding the concentration of disinfectant and contact time is critical to reducing risk. EPA notes that this practice needs to be better understood based on health impacts and that information on technology enhancements needs to be evaluated and shared. When EPA announced the rulemaking effort, it noted the purpose was to "provide certainly surrounding the use of blending by wastewater treatment plants." The purpose is to develop guidelines that states can incorporate into their permitting process.

II. WWEMA's Position

1. **Any Rule Should Be Simple, Flexible and Provide Clarity On Parts Of The CWA Related To Blending In Treatment Plants.** Provide clarity and changes on parts of the CWA that prevent the use of blending within SSS treatment plants.

2. **Clarify That Peak Wet Weather Flow Management Is Not A Bypass.** Managing peak wet weather flows around bottlenecks is an effective engineering practice and is not a bypass when the diversion is consistent with the designed operation of the plant, protects the biological treatment processes, and is designed to meet all permit limits. Such approaches maximize the treatment of wet weather flows, improves the resiliency of utilities by protecting biological treatment units from peak flows, and provides an auxiliary treatment option (solids removal and disinfection) during the excess flow conditions.

3. **Define A Sanitary Sewer Overflow For Uniformity Throughout The Country.** A sanitary sewer overflow (SSO) is a type of unauthorized discharge of untreated or partially treated wastewater from a collection system or its components (e.g., a manhole, lift station, or cleanout) before reaching a treatment facility.

4. **As Part of Its Peak Flow Management Rule EPA Should Withdraw Percent Removal Requirements From The Secondary Treatment Rule.** The BOD/TSS percent removal requirements provide absolutely no environmental benefit. BOD and TSS technology and, where necessary, water quality-based limits provide 100 percent water quality protection for these pollutants. Percent removal is a completely unnecessary, ineffective, and inappropriate regulatory burden that should be removed from the secondary treatment rule.

5. **Clarify Biological Treatment Is Not Required for Auxiliary Wet Weather Treatment Trains.** Many of the new enhanced solids removal technologies produce equivalent secondary effluent quality.

6. **Define Peak Wet Weather Flow Management / Blending.** Provide language on what peak wet weather flow management / blending is for the water industry. The language should define basic principles and/or minimum requirements of auxiliary wet weather treatment such as removal solids and disinfection.

7. **Technology Suppliers Have Developed New Solutions Over The Last 30 Year That Achieve High Quality Effluents for CSO/SSO Applications.** Technology suppliers have developed many new monitoring, treatment (solids removal), and disinfection technologies when combined together can achieve the permit requirements of a treatment facility. These enhanced treatment technologies can achieve the equivalent water quality similar to conventional secondary processes. These technologies are proven with operating installations throughout the country on CSO / SSO applications.

8. **Utilities Need A Toolbox Of Technology Solutions To Maximize Effective Management Of Wet Weather Flows.** In the development of the rule, the solution for utilities is the ability to use a combination of solutions to reduce/eliminate sanitary sewer overflows. These solutions include combinations of enhanced treatment technologies, storage, network flow management, I/I reduction, etc. Each utility have different challenges which means there is not one solution that fits. Allow the utilities, consultants (engineering firms) and technology suppliers develop plans that meet the permit requirements while providing the most effective solutions to rate payers. The rule should not limit an utility's ability to use any technology and/or combination of technologies.

9. **Peak Wet Weather Flow Management Can Provide Significant Pollutant Reductions That Are Otherwise Infeasible**. As communities strive to achieve the greatest environmental/public health benefits, peak flow management approaches can deliver significant pollutant reductions concurrently with other higher community environmental benefit investments. Additionally, it provides health benefits by reducing pollutant loads to receiving water bodies and reducing backups in the network including households.

10. **Peak Wet Weather Flow Management Occurs at Hundreds of Facilities Nationwide With Excellent Results/Performance**. Many publicly owned treatment works have worked diligently over decades to maximize flows by routing flows around treatment plant bottlenecks during wet weather events. These facilities have done so while maintaining full compliance with all permit limits with technologies developed by technology suppliers.

11. **Peak Wet Weather Flow Management Is A Critical Management Strategy to Affordably Address Climate Change**. Local governments need flexibility to maximize the pollutant reduction their public sewer systems can provide to peak wet weather flows. As we strive to address the sewer infrastructure demands which changing climate will bring we need every possible tool available to affordably manage peak wet weather flows.

12. **Peak Wet Weather Flow Management Must Meet All Water Quality Requirements at the Point of Discharge.** Any peak wet weather flow management approach must ensure that applicable permit conditions will be met at the final discharge location. Compliance for most pollutant parameters should be based on the typical averaging of samples taken over an appropriate time period, and not on single samples taken during a peak flow event. Monitoring of performance during the wet weather flow events should remain reasonable and with the typical monitoring requirement of a treatment plant.

13. **Utilities That Divert Peak Wet Weather Flows Should Do So In Accordance With An Approved Peak Flow Management Plan**. This plan should identify how the POTW will (1) prepare for wet weather, (2) maximize flows through available main treatment units (primary, secondary, and tertiary – if applicable) and the thresholds when flow routing will be triggered, and (3) follow-up after the peak flow event has passed. In the plan, it should include the how flows will be monitored throughout the plant documenting the maximizing of the flow through the main treatment plant and auxiliary wet weather treatment train(s).

14. **Treatment Technologies Provide More Capacity Than Storage.** Many of the new enhanced filtration and clarification treatment technologies provide treatment throughout an event versus storage, which fills up and overflows. Due to increased storm intensity and duration of some storms, storage cannot be built large enough in many cases to handle these events. Storage is typically more expensive to construct than treatment technologies due to size of the tankage required to capture event volumes. Many of the existing operating peak flow treatment facilities are examples on the cost effectiveness of treatment solutions (solids removal and disinfection).

III. Resources

The issue of blending is not new to the Agency. In fact, back on December 22, 2005 the Agency published a notice of availability and request for comment in the *Federal Register (FR)* on *National Pollutant Discharge Elimination System (NPDES) Permit Requirements for Peak Wet Weather Discharges from Publicly Owned Treatment Works Treatment Plants Serving Separate Sanitary Sewer Collection Systems.* The draft policy outlining possible approaches as published in the *FR* notice can be found at https://www.gpo.gov/fdsys/pkg/FR-2005-12-22/pdf/E5-7696.pdf. While EPA never finalized the rulemaking for blending, NPDES permit bypass procedures are codified in the 40 CRF §122.41(m) at https://www.ecfr.gov/cgi-bin/text-idx?SID=3977fddf53c3f23874101ab47248a694&mc=true&node=se40.24.122_141&rgn=div8.

On April 18, 2014, EPA published a *FR* notice announcing an *Experts Forum on Public Health Impacts of Blending at Publicly Owned Treat Plants* that was held June 19-20, 2014. EPA assembled a group of

public health experts to discuss the public health implications of blended effluent discharges from POTWs into waterways. These public health experts were enlisted to ensure that EPA had up-to-date information on the pollutant discharges that may be associated with the different engineering options available to address wet weather blending at POTWs in order to consider the potential public health implications of these different options. The expert's forum did not include discussion of the application of the Agency's bypass regulation at 40 CFR §122.41(m) going forward (the bypass regulation prohibits the intentional diversion of waste streams from any portion of a treatment facility except where necessary for essential maintenance to assure efficient operation). Rather, the forum was solely concerned with the potential public health impacts of blended discharges from POTWs. A copy of the April 18 *FR Notice* can be found at https://www.gpo.gov/fdsys/pkg/FR-2014-04-18/pdf/2014-08925.pdf. For those interested in obtaining more background information regarding the Agency's past actions on blending, go to https://www.epa.gov/npdes/npdes-experts-forum-public-health-impacts-wet-weather-blending-documents.

On August 31, 2018, EPA published a *FR Notice* announcing three public listening sessions to obtain stakeholder input on peak flows management. A copy of the notice can be found at https://www.govinfo.gov/content/pkg/FR-2018-08-31/html/2018-19016.htm. A day before the first public listening session, on October 15, 2018, EPA held a *Technical Roundtable on U.S. EPA Peak Flows Management Rulemaking.* A number of stakeholders from manufacturers, utilities, environmental groups, lawyers, and regulatory agencies were invited to participate in the roundtable discussion. For more information on current efforts, visit https://www.epa.gov/npdes/municipal-wastewater.

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