Presumed Compliant? Meeting Twenty-First-Century Combined Sewer Overflow Goals with (or without) the Presumptive Approach

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reliable compliance rubric is critical for any entity subject to federal environmental permitting and enforcement. Clear benchmarks are important to understand what thresholds are necessary to satisfy regulators' expectations and facilitate an eventual release from enforcement orders. For public water utilities, because the length of Clean Water Act (CWA) enforcement orders can be measured in decades and require capital investments ranging in the billions of dollars, a well-defined compliance target is necessary for initial planning and implementation of remedial measures. As such, when regulators' compliance expectations change, the consequences are far-reaching, both as to utilities' requirements and schedules as well as the cost burdens on ratepayers.

One recent trend in compliance benchmarking is an apparent shift by the U.S. Environmental Protection Agency (EPA or Agency) away from the so-called presumptive approach, a metric used to establish the required level of control for utilities under enforcement actions (most often through consent decrees) for sewer overflows from combined municipal wastewater and storm water collection systems. The presumptive approach historically has provided a reliable target for utilities negotiating consent decrees and implementing resulting requirements. As detailed below, the presumptive approach ties a utility's presumed compliance with the achievement of certain control criteria, and in a manner that allows for infrastructure investment aimed at meeting such criteria.

A shift away from this metric may result in unclear compliance (and financial) obligations for utilities that have invested in costly combined sewer overflow (CSO) controls aimed at meeting the presumptive targets associated with the control criteria. This article discusses the apparent roots of this development, namely a recent change in EPA philosophy that seeks to ensure that wastewater and storm water infrastructure improvements actually result in a quantifiable benefit to receiving waters. This effort is similar to other agency trends that see certain designs and levels of control previously deemed acceptable becoming less favored within EPA's ongoing evolution of permitting and enforcement approaches. Utilities subject to CWA requirements should be aware of the development and anticipate potential impacts to their own compliance plans.

Policy Background and Examples of Presumptive Approach

In 1994, EPA developed its Combined Sewer Overflow (CSO) control policy (CSO policy), which requires communities to develop a long-term control plan to reduce or eliminate CSOs. The CSO policy has been incorporated into the CWA by reference at 33 U.S.C. § 1332(q)(1), but customary references are to the policy's incorporation in the Federal Register in 1994. See 59 Fed. Reg. 18,688 (Apr. 19, 1994), available at https:// www3.epa.gov/npdes/pubs/owm0111.pdf. The CSO policy allows communities to choose between two approaches: one that allows for the "presumption" that the community is meeting the water quality-based requirements of the CWA based on meeting certain control metrics (presumptive approach), or an approach under which the community controls CSO to a point that is sufficient to "demonstrate" compliance with water quality standards (demonstration approach or demonstrative approach).

Under the presumptive approach, compliance with water quality standards may be presumed if a utility achieves 85 percent CSO flow capture, reduces CSOs to an average of four per year, or eliminates or removes "no less than the mass of the pollutants identified as causing water quality impairment through the sewer system." *Id.* This approach may be attractive to some communities in that it provides an exact formula for compliance and the presumption of finality if a utility simply implements the required projects and meets the selected control target. However, many communities are moving away from this approach, finding it to be less cost effective and with little or no connection to improvements in water quality.

The deficiencies in the presumptive approach are in part a function of EPA's and state agencies' enforcement history. Over the years, the measures of success have been based on the number of enforcement actions taken, the resulting capital improvement dollars spent, and the penalties assessed. Actual water quality benefits attained by such actions received secondary consideration. *See, e.g.*, EPA, Enforcement Annual Results for Fiscal Year 2015, *available at* https://www.epa.gov/

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enforcement/enforcement-annual-results-fiscal-year-fy-2015. For communities entering into CWA consent decrees, this quantity-over-quality approach proved helpful in setting clear enforcement metrics, but unproductive in promising environmental benefit. Billions of dollars in limited public resources were spent on remedial projects with no guarantee that they would result in tangible water quality improvements. See EPA, Office of Inspector General, EPA Needs to Track Whether Its Major Municipal Settlements for Combined Sewer Overflows Benefit Water Quality, 4 (Sept. 16, 2015) ("Using EPA data, the OIG estimates that it will cost communities more than \$32 billion to complete the required actions and penalties contained in the 47 consent decrees.") (hereinafter, OIG Report). Indeed, many of these communities face substantial and ongoing affordability challenges responding to EPA's mandates as they continue to recover from the impacts of the recession that began in 2008.

In this context, the dollar-based enforcement philosophy ignores the financial impacts of the CSO and sanitary sewer system overflow (SSO) programs and wrongly presumes that if a community spends a certain amount of money or constructs a specific type of infrastructure project, targeted water quality problems will be addressed. This simply is not the case, as every community will have unique environmental needs and may face contributions to water quality impairments from other sources. Moreover, an enforcement paradigm that measures success solely based on the number of enforcement actions and dollars spent or paid in penalties ignores the significant economic impact on communities undertaking these projects.

By contrast, communities undertaking CSO control programs using the demonstration approach can more directly tie their efforts, and investment, to water quality improvements rather than pure reduction of overflows, even if compliance may initially appear more ephemeral. This approach involves the utility demonstrating via data and monitoring that the proposed controls are adequate to meet water quality standards and that any remaining CSOs will not prevent attainment of water quality standards. *Id*.

This demonstration approach also allows utilities to detail the water quality benefits of a plan in a holistic manner, as opposed to focusing solely on CSO reductions and associated projects. These benefits might include a greater number of days of compliance with water quality standards, nutrient reductions, increased number of stream miles improved, and improved ecological and human health conditions. Such an analysis can also be useful in justifying a city's proposed control levels, both in consent decree negotiations and to the public, and may not require strict adherence to a specific percent of control or a particular number of overflows per year. Even so, the demonstrative approach may not be appropriate in all circumstances, with considerations such as budget, topography, and existing infrastructure counseling in favor of a settlement agreement that turns on the success of a utility in meeting predetermined obligations.

Several enforcement examples demonstrate utilities' reliance upon the presumptive approach metric and the expectations that accompany the approach. In the city of Philadelphia, Pennsylvania, water department's consent order with the Pennsylvania Department of Environmental Protection, the approved control plan was "based upon a 'Presumption' approach, consistent with the National CSO Policy," pursuant to which the department would "eliminate or remove no less than the mass of pollutants . . . that otherwise would be removed by the capture of 85% by volume of the combined sewage collected" Consent Order and Agreement, *Commonwealth of Pennsylvania (In re City of Philadelphia)*, at 15, June 1, 2011. The 2013 partial consent decree between EPA and the Unified Government of Wyandotte County and Kansas City, Kansas, includes a list of set CSO control alternatives that included capacity evaluations of a certain wastewater treatment plant, use of CSO technology by sewershed, and identified control alternative tasks that included application of hydraulic modeling for alternatives analysis, consistent with the CSO policy. *See* Partial Consent Decree, *United States v*. *Unified Government of Wyandotte County and Kansas City*, No. 2:13-cv-02141, at 50–52 (D. Kan. Mar. 21, 2013).

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As referenced above, the CSO policy is the foundation for the presumptive approach, as it lists the above-referenced criteria that "would be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA" 59 Fed. Reg. at 18,692. As such, CWA settlements, including those listed above, have repeatedly referenced control plans' consistency with that policy and the presumption that the utility will be deemed in compliance if it satisfies the compliance framework outlined therein.

Recent Developments Suggest Water Quality Focus

For many years, the National Association of Clean Water Agencies (NACWA), a national trade association representing nearly 300 municipal wastewater and storm water utilities, and others have advocated for a more robust analysis of a community's ability to shoulder the burden of consent decree requirements. In 2012, NACWA and other organizations succeeded in convincing EPA to develop a new framework that allows communities to look at CWA compliance obligations, including storm water, asset management, and wastewater planning, more holistically and to prioritize projects based on the environmental benefit to their communities. Regardless of whether utilities elect to implement compliance projects pursuant to a presumptive approach or pursuant to the more community-focused demonstration approach, broader

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ratepayer impacts must be part of the evaluation of the value and appropriateness of the program for a given community.

The recent trend in favor of integrated planning and incorporation of green infrastructure in consent decrees may also signal a shift away from the presumptive approach in general.

Several recent developments suggest that EPA may be shifting away from measuring success in terms of number of enforcement actions and dollars spent on traditional infrastructure toward a more holistic approach to CSO enforcement that is focused on improving water quality. As such, this may also represent a shift in EPA's view and use of the presumptive approach. While EPA has not announced an official policy or position on a shift away from the presumptive approach, recent statements by EPA staff suggest that the Agency indeed believes the approach will not provide sufficient water quality improvements. At a fall 2016 meeting of clean water utility professionals, a senior level Agency official opined that communities using the presumptive approach may find themselves needing to complete additional work at the conclusion of their decrees because they are not meeting water quality standards. These comments in the context of several other recent developments suggest that while EPA remains committed to "keeping raw sewage and contaminated stormwater out of the nation's waters," as noted in the Agency's FY 2017–2019 enforcement initiatives, it intends to focus more on water quality improvements rather than elimination of overflows as the measure of success. See EPA National Enforcement Initiatives for 2017–2019 at 1, Feb. 18, 2016, available at https://www.epa.gov/enforcement/ national-enforcement-initiatives.

OIG Report Suggests Water Quality Improvement Is the Appropriate Compliance Measure

In September 2015, EPA Office of Inspector General (OIG) released a report, EPA Needs to Track Whether Its Major Municipal Settlements for Combined Sewer Overflows Benefit Water Quality (OIG Report), criticizing EPA's approach to CSO enforcement. OIG Report at 4. Specifically, the report notes that while EPA's CSO enforcement initiatives have led to significant municipal investment and reduction of CSOs nationwide, EPA has not studied or tracked whether the overflow reductions have resulted in the corresponding improvements to water quality the agency has presumed. The report acknowledges that "[c]onsent decrees involve significant financial investments from ratepayers," and cautions that without an evaluation of their impact on water quality, "it is unknown whether billions of dollars invested in CSO system changes and upgrades actually lead to the water quality improvements that the EPA anticipated, and reported to Congress and the public." *Id.* at 4.

As noted above, EPA has not formally indicated plans to revise the CSO policy's provisions (or implementation practices) regarding the presumptive approach, which would require an act of Congress to effectuate, but the OIG Report is evidence that utilities may see a de facto movement toward the demonstration approach, connecting compliance verification with data from water quality sampling, and determining whether a utility is a contributor to water impairment. Such a shift is not inconsistent with the broader EPA approach in the context of CWA enforcement for SSOs, where EPA has pursued their outright "elimination" as a compliance goal. See, e.g., Consent Decree, United States v. San Antonio Water Sys*tem*, No. 5:13-cv-00666, at 5, ¶ 6 (W.D. Tex. July 23, 2013); Consent Decree, United States v. City of Fort Smith, No. 2:14cv-02266, at 5, ¶ 3 (W.D. Ark. Jan. 2, 2015). Thus, while CSO and SSO systems are designed differently (and treated as such in negotiations), the EPA trend to reference the elimination of overflows is instructive as to efforts on the CSO presumptions.

Integrated Planning Offers Flexibility and Prioritizes Water Quality Improvements

While EPA has yet to share any specific vision for implementing the OIG Report's recommendation and tying its enforcement efforts more closely to water quality, the recent trend in favor of integrated planning and incorporation of green infrastructure in consent decrees may also signal a shift away from the presumptive approach in general. EPA's June 2012 Integrated Municipal Stormwater and Wastewater Planning Approach Framework explains that the Agency is now emphasizing the importance of allowing a municipality "to balance CWA requirements in a manner that addresses the most pressing public health and environmental protection issues first." EPA, Memorandum: Integrated Municipal Stormwater and Wastewater Planning Approach Framework, 2 (June 5, 2012) (hereafter, Integrated Planning Framework). Under this voluntary integrated planning principle, municipalities choose how projects are prioritized and develop their own schedule for investments to meet CWA obligations.

The guidance notes that "[s]ufficient flexibility should be provided in enforcement orders to allow for adaptive management principles" and "[w]here an extended time frame is necessary to achieve compliance, enforcement orders should provide schedules for CWA requirements that prioritize the most significant human health and environmental needs first." Integrated Planning Framework at 7. EPA further encourages the use of green infrastructure to provide more sustainable management of storm water as a resource. Id. at 2. In a followup July 2013 document, Integrated Municipal Stormwater and Wastewater Planning Frequently Asked Questions (FAQs), EPA explained that integrated planning "will take advantage of the flexibilities in existing EPA regulations, policies, and guidance to allow municipalities to sequence implementation of their CWA obligations." EPA, Integrated Municipal Stormwater and Wastewater Planning Frequently Asked Questions (FAQs), 6 (July 2013).

Consistent with EPA's increasing flexibility and willingness to consider more holistic approaches to wastewater and storm water planning, communities are also looking to green infrastructure and low impact development as options for CSO control. Green options can have the added benefits of community revitalization and beautification, flood control. groundwater recharge, and other water quality benefits beyond simply controlling overflows. EPA recognizes the value of these alternatives and encourages communities to include green infrastructure in integrated plans. See, e.g., Center for Neighborhood Technology & American Rivers, The Value of Green Infrastructure: A Guide to Recognizing its Economic, Environmental, and Social Benefits (2010); Noah Garrison, et al., Rooftops to Rivers II: Green Strategies for Controlling Stormwater and Combined Sewer Overflows (Natural Resources Defense Council 2011). Communities attempting to comply with a presumptive approach decree may find it difficult to include green components in their programs. For decrees requiring a higher level of control, many utilities are finding instead that a hybrid approach using a combination of both gray infrastructure and green infrastructure can provide optimum environmental results and the most reasonable cost.

While integrated planning does not necessarily require utilities to use the demonstration approach (nor does it prohibit the use of the presumptive approach), it nonetheless focuses on improving water quality, encourages the use of green infrastructure, and allows communities to prioritize projects with water quality improvement in mind. Indeed, there are several consent decrees tying projects and schedule to water quality impacts. Although the use of integrated planning is voluntary, and often must be suggested or requested by the regulated entity, its increasing application suggests EPA's interest in shifting toward water quality improvement as a measure of success. The fact that many municipalities and clean water utilities are also interested in integrated planning suggests a growing desire among the regulated community to link investments to measurable water quality results.

For example, a 2013 consent decree with Seattle allows the city to submit an integrated plan, provided that it would achieve water quality improvements beyond those to be achieved by CSO control measures. Consent Decree, United States v. City of Seattle, No. 2:13-cv-678 (W.D. Wash. Apr. 16, 2013). Section IX of the partial Consent Decree for the Unified Government of Wyandotte County and Kansas City, Kansas, also entered in 2013, requires the development of an Integrated Overflow Control Plan (IOCP), which is to consider a range of alternatives for reducing CSOs and SSOs, implementing green infrastructure where feasible. Consent Decree, United States v. City of Kansas City, Missouri, No. 4:10-cv-0497 (W.D. Mo. Nov. 19, 2014). Although evaluation of alternatives and scheduling of projects under the IOCP requires reference to percent control and reduction of overflows, water quality improvements are nonetheless a key driver. The City of Evansville, Indiana, and Evansville Water Sewer Utility Board Consent Decree, entered in 2010, requires prioritization of projects based on identified sensitive areas and analysis of the impact on environmental justice populations. Consent Decree, United States v. City of Evansville, No.3:09CV128 (S.D. Ind. June 22, 2011). In addition to a consideration of reduction of SSO volume and frequency, the City of Revere, Massachusetts, Consent Decree, entered in 2010, requires prioritization of projects based on their

"impact on human health and the environment," and costeffectiveness. Consent Decree, *United States v. City of Revere*, No. 1:10-cv-11460 (D. Mass. Aug. 25, 2010). Hampton Roads Sanitation District in Southeastern Virginia entered into a 2010 consent decree, which requires an alternatives analysis weighing "life cycle costs, feasibility of construction, operation and maintenance impacts, water quality benefits, and other relevant factors." Ultimately, the utility must "weigh the protectiveness and cost of the alternatives." Consent Decree, *United States v. Hampton Roads Sanitation District*, No. 2:09-cv-00481 (E.D. Va. Feb. 23, 2010).

Communities have always had the option to choose between an approach that presumes compliance based on a certain level of control and an approach that is more closely tied to water quality improvements.

To be sure, communities have always had the option to choose between an approach that presumes compliance based on a certain level of control and an approach that is more closely tied to water quality improvements. The foregoing decrees and agreements signal EPA's movement toward a more flexible interpretation of the CSO policy that accounts for the financial capability of the community to absorb the compliance requirements, recognizes the importance of integrated planning, and allows communities to pursue strategies that maximize the potential for environmental and health benefits on a more individualized basis. In addition, they indicate movement by EPA toward a valuation of water quality as the more proper measure of success in CSO enforcement, but they also represent tools communities may use to address EPA's shifting preference for the demonstration approach. Even so, communities completing CSO reduction programs using the presumptive approach may be left wondering whether they will be expected to engage in additional projects to comply with EPA's new vision of success.

Impacts/Anticipated Next Steps

Although the presumptive approach has been a cornerstone for CWA compliance planning for more than two decades, the recent developments outlined above may shift utilities' reliance on it. The approach has been valuable as a metric to show the utility's successes under enforcement, and in justifying termination. As policy in this arena continues to develop, utilities should consider several of the following concepts to limit surprises and to anticipate further movement.

Utilities already under enforcement should continue to tie

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their compliance obligations to the specific terms of their consent decree or order. Such entities should be familiar with the specific options and provisions found in their enforcement order and should carefully review the post-construction monitoring requirements of their decree for any provisions that tie termination to water quality. These utilities should urge regulators to comply with the terms of the parties' agreement as to remedial requirements and termination provisions.

Utilities operating under presumptive approach decrees may find themselves facing additional or renewed enforcement efforts as EPA seeks to use water quality, rather than dollars invested and overflow reduction, as a measure for success.

Utilities are not without legal remedies in asking regulators to honor their original agreements. Consent decrees are contracts and will be interpreted by the courts as such, meaning that if a utility has complied with all mandates of the decree, the court should honor the termination provisions regardless of the Agency's desire for additional projects. Moreover, unless Congress acts to revise the CWA and eliminate the presumptive approach from the CSO policy, utilities completing programs under this approach should be able to rely on their compliance with its mandates in defending any new enforcement litigation. While a collaborative approach with regulators is often advisable for a variety of reasons, litigation can be an appropriate tool when an otherwise compliant community is faced with additional or extended enforcement (such "extended enforcement" may include a refusal by regulators to terminate a Consent Decree due to water quality impairment and new Clean Water Act violations not addressed by the initial enforcement action).

Even if a utility believes litigation may be necessary, the utility should gather and review data and other information concerning point-source and non-point-source contributions to water quality impairments, and should be prepared to discuss this with EPA. This data will allow a community that has fully complied with a decree to evaluate whether it is appropriate for the community to engage in further work to address water quality after the legal termination of the decree. The community also will need to consider its financial capability and the impact of further work on its ratepayers—including the non-financial impacts of the project, the utility's contributions to remaining water quality impairments versus other sources, and the political viability of engaging in further work that has not clearly been mandated by EPA.

Other options are also available for utilities in enforcement negotiations or anticipating them. As noted above, EPA's Integrated Planning Framework allows utilities the flexibility to organize and sequence compliance goals across regulatory platforms in a holistic and prioritized manner. The development of an integrated plan may present value to utilities, regardless of EPA enforcement, but for communities facing a consent decree or other settlement vehicle, an integrated plan can help outline CWA obligations and tie those projects to a workable schedule. Consistent with that framework, utilities should advocate the need for clear expectations of project schedules and compliance approaches in its negotiations. To the extent that there are known water quality issues, the utility may wish to identify broader monitoring and sampling approaches-targeted at EPA's interest in data collection, but residing outside of the enforcement order itself.

By conveying the need for reliable, fixed compliance targets (in a way that also promotes water quality improvements), a utility may be successful in avoiding or limiting unwanted surprises as an enforcement order nears its end. Utilities should communicate their shared interest with EPA in CWA compliance, but in a manner that does not leave a utility and its ratepayers vulnerable to uncertainty or affordability issues. Identifying common goals and articulating clear recommendations to address water quality impairments can help address regulators' concerns, while preserving the benefits of the presumptive approach.

Although additional flexibility and a connection to water quality improvement in their communities may be attractive to some utilities reducing CSOs under federal consent decrees, an apparent shift away from the presumptive approach may prove challenging for utilities that have relied on the certainty it once provided. Utilities operating under presumptive approach decrees may find themselves facing additional or renewed enforcement efforts as EPA seeks to use water quality, rather than dollars invested and overflow reduction, as a measure for success. Nonetheless, these utilities may be able to use data supporting water quality improvements under their existing programs to satisfy any additional regulatory concerns. Utilities should rely on the terms of their decree regarding finality, but, if necessary, they should seek to take advantage of the flexibility provided by integrated planning to ease the burden of extending their program schedule.

If water quality improvements represent the ultimate goal of EPA's CSO enforcement program, it is difficult to envision how victory can ever be declared if water quality improvements are never measured. And, if communities do not have the opportunity to tie project phasing and successful implementation to water quality improvement, it can be difficult to see the value in CSO reduction projects at all. That said, for communities that have entered into a decree using the Presumptive Approach, completing multimillion dollar programs with the expectation that making the required overflow reductions would equate to CWA compliance, a shift in focus toward water quality improvements as the measure of success-however appropriate-could leave these communities holding the proverbial bag with longer decree terms and increased costs. As always, a utility's ability to emphasize common goals of maintaining and improving ratepavers' quality of life while improving water quality, without sacrificing affordability, can result in positive outcomes and productive discussions with regulators. 😤