



Association of
Metropolitan
Sewerage Agencies

White Paper

Sanitary Sewer Overflows: Legal Issues

AMSA represents nearly 300 of the nation's publicly owned wastewater treatment agencies, which serve the majority of the sewered population in the United States. Our members collectively treat and reclaim more than 18 billion gallons of wastewater each day. For more than 30 years, AMSA has worked closely with the U.S. Environmental Protection Agency, Congress, and other clean water stakeholders to achieve our nation's clean water goals by fostering the development, implementation, and coordination of major water programs.

AMSA has consistently advocated for a workable and cost-effective national regulatory framework for sanitary sewer overflows (SSOs). Achievement of this goal has been elusive for many reasons. One of these reasons is the absence of a succinct discussion of how the Clean Water Act, its implementing regulations, and key legal and regulatory precedents can be woven together to support various SSO regulatory approaches. Accordingly, this White Paper compiles and analyzes the relevant precedents and discusses how they can be used to achieve practical results, even before a final SSO regulatory program becomes a reality.

White Paper Executive Summary

Efforts to promulgate a federal sanitary sewer overflow (SSO) regulation under the Clean Water Act (CWA) have been on-going for many years. In November 2001, the U.S. Environmental Protection Agency (EPA) committed to proposing its January 2001 draft SSO regulation, but continued discussion of the legal status of SSOs, blending and related wet weather policies have delayed federal action since that time.

In the interim, AMSA's *Wet Weather* and *Legal Affairs Committees*, and the *SSO Work Group*, have spent time studying the approach to SSO regulation described in the January 2001 draft as well as various alternatives to that approach. Some of these alternatives were discussed with EPA in advance of the January 2001 draft, some were discussed and dismissed in the draft preamble, and others have come to light with subsequent study and evaluation. Accordingly, these *Committees* have used AMSA's Technical Action Fund (TAF) to work with AMSA affiliate law firm Squire, Sanders and Dempsey, LLP to produce this *White Paper*.

The various alternatives discussed in this *White Paper* reveal that there is much greater statutory, regulatory, and legal flexibility to develop an innovative, flexible and effective SSO regulation than previously contemplated. This *White Paper* is designed to debunk, demystify, and detail the *legal issues* surrounding the management, enforcement, and potential regulation of SSOs. This *White Paper* does not address many related SSO issues, nor does it purport to be a comprehensive assessment of SSO policy. Nonetheless, the cases, regulatory provisions, and statutory elements discussed in this *White Paper* will be useful not only as AMSA continues discussions with EPA and stakeholders regarding a future SSO regulation, but also to publicly owned treatment works (POTWs) seeking to respond to SSO questions in the context of permitting, enforcement, or other related proceedings.

SSO Background

Building upon the interest in municipal wet weather issues that began with the April 1994 release of the federal *Combined Sewer Overflow Policy*, in 1995 EPA formed the Urban Wet Weather Flows Advisory Committee pursuant to the Federal Advisory Committee Act (FACA). The Committee was to assist EPA in the development of cost-effective solutions for controlling the environmental and human health impacts of urban wet weather flows with minimal regulatory burden.¹ A Subcommittee to discuss regulatory options for SSOs was convened, and after ten meetings and a two and a half year hiatus, in October 1999 the Subcommittee generally endorsed elements that should be included in an SSO regulation. In January 2001, a proposed SSO regulation (hereinafter the Draft SSO rule) was signed by EPA Administrator Browner.² However, the incoming Bush Administration withdrew the proposal before it was published in the *Federal Register*. Although EPA has stated it will propose the January 2001 regulatory text with a revised preamble, an actual regulatory proposal still appears to be far in the future – and is even more remote with pre-election issues and considerations likely taking precedence at the Agency in the coming months.

¹ 60 *Fed. Reg.* 21,189 (May 1, 1995).

² The 2001 SSO draft is available at http://cfpub.epa.gov/npdes/regresult.cfm?program_id=4&view=all&type=3 or <http://www.amsa-cleanwater.org/private/regalerts/ra01-2.cfm>.

I. EPA's Legal Analysis in the Draft SSO Rule

Although the Draft SSO Rule was not formally published in the *Federal Register* as a proposed regulation, it nevertheless contains the latest public statement of the Agency's position with regard to the legal status of SSOs. In the preamble, EPA proposes to follow a "prohibition and excuse" approach to SSO regulation, in which SSOs would be categorically prohibited and could only be excused through the exercise of "enforcement discretion" (in emergency situations when there is no feasible alternative to the overflow) or on the basis of an extremely limited "affirmative defense" (when they are caused by severe natural conditions such as hurricanes, tsunamis and earthquakes).

The draft rule contains four principal components: (1) a proposed capacity, management, operation and maintenance (cMOM) standard permit condition for sanitary sewer collection systems (to be codified in 40 CFR 122.44(e)); (2) the proposed prohibition against discharges from sanitary sewer collection systems (to be codified in 40 CFR 122.44(f)); (3) proposed permit requirements for satellite collection systems (to be codified in 40 CFR 122.38); and (4) proposed standard permit conditions for reporting, public notification and public recordkeeping for sanitary sewer systems and SSOs (to be codified in 40 CFR 122.44(g)).

A. EPA's legal basis

1. Legal basis for the "prohibition approach"

EPA claims in Part IV.B of the Draft SSO rule preamble that the "prohibition" would be a "technology-based limitation" based on CWA § 301(b), which prohibits discharges except in compliance with the Act. The basis for its position is as follows:

- (1) SSOs are required to meet secondary treatment (in support of this proposition, the preamble cites the statement in EPA's Sept 8, 1989 *CSO Control Strategy* that "[d]ischarges from sanitary sewer systems with less than secondary treatment are prohibited."³
- (2) Because "as a practical matter," sewage discharges cannot meet such limitations unless treated, EPA concludes that sanitary sewer discharges "should not be authorized except from outfalls at a treatment facility."

Notwithstanding these obstacles to authorizing any sanitary sewer discharges that have not received full secondary treatment, EPA suggests that SSOs caused by "severe natural conditions" could be excused from the prohibition based on a codification of "enforcement discretion," and that SSOs caused by accidents and emergencies could be excused based on the establishment of an "affirmative defense."

EPA claims that this "prohibition and excuse" approach is "consistent with EPA's longstanding interpretation" of the CWA, and that it was "unanimously supported" by the SSO Subcommittee.

³ 54 *Fed. Reg.* 37370, 37371.

Although it solicits comments on an alternative approach in which NPDES permits could authorize SSOs under a statutory theory other than secondary treatment, EPA argues that this would require a change in EPA's "historic" interpretation that the CWA requires secondary treatment of all sewage from POTWs, and that SSOs are part of the POTW. This "historic" interpretation is said to be based on the definition of POTW in 40 CFR 122.2, 125.2 and 125.3(a)(1)(i) to include "pipes, sewers, or other conveyances only if they convey wastewater to a POTW providing treatment."

2. "Proper operation and maintenance" requirements

In discussing the legal basis for its proposed cMOM requirements, EPA notes that under the existing NPDES requirements at 40 CFR 122.41, all NPDES permits contain two standard conditions addressing operation and maintenance: 1) the "proper operation and maintenance" requirements,⁴ and 2) the "duty to mitigate" requirements.⁵ EPA believes that these two conditions require every permittee to take all reasonable steps to minimize or eliminate SSOs and to provide adequate collection system capacity. EPA also notes in this section of the preamble that certain provisions in the federal construction grant regulations required grantees to assure proper and efficient operation and maintenance of treatment works and their associated collection systems.⁶

3. Regulation of satellite collection systems

EPA recognizes that many sanitary sewer collection systems are not entirely owned or operated by a single municipal entity or by the owner/operator of the POTW into which they discharge. In Part V.E of the Draft SSO Rule preamble, EPA states that its legal basis for regulating satellite collection systems "derives from the definition of 'publicly owned treatment works.'" EPA notes that the definition of "treatment works" in CWA § 212(2)(A) includes "any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature . . . including . . . intercepting sewers, outfall sewers, sewage collection systems . . ." EPA then claims that its regulatory definition of "publicly owned treatment works"⁷ is "similar," although there are key differences in the language actually found in the cited regulations. EPA's intention is that the cMOM provisions in the Draft SSO Rule would be implemented throughout the entire "POTW," which is "defined to include the POTW treatment plant and the collection system."

4. Definition of Sanitary Sewer Overflows

EPA discusses the definition of SSOs in Part II.C of the Draft SSO Rule preamble.⁸ It divides the universe of SSOs into three "classes," which include (a) overflows that reach waters of the United States; (b) overflows that do not reach waters of the United States; and (c) wastewater

⁴ 40 CFR 122.41(e).

⁵ 40 CFR 122.41(d).

⁶ Draft SSO Rule preamble at 64, citing 40 CFR 35.925-10; 35.935-12; 35.2106; and 35.2206.

⁷ 40 CFR 122.2 and 403.1.

⁸ Draft SSO Rule preamble at 79-81.

backups into buildings caused by blockages or flow conditions in a sanitary sewer (other than a building lateral).

The proposed prohibition provision of the Draft SSO Rule would only apply to the first class, SSOs that discharge to waters of the United States. The proposed reporting, public notification and recordkeeping standard condition, however, is “tiered,” with different proposed requirements applying to different classes of SSOs. All SSOs, including those that do not reach waters of the United States, would be identified in annual reports and subject to recordkeeping requirements; SSOs that discharge to waters of the United States would be identified in DMRs; SSOs that “may imminently and substantially endanger human health” would be subject to noncompliance reporting and public notification whether or not they discharge to waters of the United States.

5. Discussion of the “authorization alternative”

In Part IV.C of the Draft SSO Rule preamble,⁹ EPA solicits comment on an alternative approach that would authorize SSOs under a statutory theory other than secondary treatment. This alternative would apply a separate technology standard for SSOs based on BAT (for toxic pollutants) and BCT (for conventional pollutants), similar to the approach used for CSOs in the 1994 CSO Policy. Instead of the Nine Minimum Controls used for CSOs, BAT/BCT for SSOs would be based on conditions similar to the cMOM program.

B. Fallacies in EPA’s legal analysis

EPA’s discussion of the legal status of SSOs in the Draft SSO Rule preamble differs significantly from its previous analyses in a number of SSO subcommittee discussion papers, such as the draft “Unified Paper” circulated toward the end of 1996.¹⁰ The position finally taken in the Draft SSO Rule appears to have been heavily influenced by input from the enforcement side of the Agency and from those Regions that have taken the position that all SSOs are illegal and cannot be authorized unless they comply with Secondary Treatment.

The EPA Regions were first asked to comment on the emerging SSO Subcommittee consensus at the time that the draft Unified Paper was issued in November of 1996. Extreme “negative feedback” was received by EPA headquarters from four of the six Regions that submitted comments (Regions 3, 4, 5 and 7). (Region 1 also stated that SSOs are unauthorized and cannot be permitted, and that EPA should not accept that wet weather will cause a system to overflow even once a year.) The common thread in these objections was that the Regions believed that all SSOs were unlawful, that SSO discharges were subject to secondary treatment requirements, that the creation of an affirmative defense for unavoidable SSOs would hamper enforcement efforts, and that citizen suits were a desirable and essential part of the enforcement process.

Contrary to the assertions made in the Draft SSO Rule preamble, however, this hard-line position does not reflect EPA’s “longstanding” or “historic” interpretation of the CWA. Rather, it is the

⁹ Draft SSO Rule preamble at 153.

¹⁰ “Draft Sanitary Sewer Overflow and Sanitary Sewer Operation, Maintenance and Management Unified Paper” (November 20, 1996).

interpretation of one faction within the Agency, which has been reflected in the inconsistent enforcement posture taken with regard to SSOs from one EPA Region to another.

1. EPA’s past policy statements have not consistently stated that SSOs are illegal

a. EMS “Chapter X”

Chapter X of the *Enforcement Management System* handbook, entitled “Setting Priorities for Addressing Discharges from Separate Sanitary Sewers” (1996), recognized that some SSOs have been permitted, some have not, and that their legal status depends on the permit language:

Some permits have specific requirements for these discharges, others have specific prohibitions under most circumstances, and still other permits are silent on the status of these discharges.

The legal status of any of these discharges is specifically related to the permit language and the circumstances under which the discharge occurs. Many permits authorize these discharges when there are no feasible alternatives, such as when there are circumstances beyond the control of the municipality (similar to the concepts in the bypass regulation at 40 CFR Part 122.41 (m)). Other permits allow these discharges when specific requirements are met, such as effluent limitations and monitoring/reporting.¹¹

b. 1999 preamble to NPDES permit application rules

In the preamble to its revised NPDES permit application requirements for POTWs,¹² EPA stated that “emergency” or “accidental” discharges from locations within municipal sewage collection systems that are listed in the permit application but not identified in the permit itself would not receive the protection of the “permit shield” defense:

Rather, the legal status of these discharges is specifically related to the permit language and the circumstances under which the discharge occurs. The Agency notes that NPDES permit regulations do provide limited relief under the bypass and upset provisions of 40 CFR 122.44(m) and (n), respectively, for such discharges. The Agency is currently developing guidance that would clarify the applicability of the bypass and upset provisions to such discharges.

c. 1995 memorandum on “Enforcement Efforts Addressing Sanitary Sewer Overflows”

The March 7, 1995 memorandum from Steven A. Herman, Assistant Administrator for OECA, and Robert Perciasepe, Assistant Administrator for the Office of Water, directed to the Water Management Division Directors and Regional Counsels of Regions I – X, as well as to State Program Administrators, stated that:

¹¹ *EMS Handbook*, Chapter X, at 2.

¹² 64 *Fed. Reg.* 42434, 42442 (Aug. 14, 1999).

SSO discharges to waters of the United States are prohibited *unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit*. Discharges *without an NPDES permit* are illegal. In addition, SSO discharges often cause violations of water quality standards and violate NPDES permit requirements for proper operation and maintenance.

This statement clearly implies that SSOs can be authorized in NPDES permits. Indeed, it would be impossible for SSOs to violate the O&M provisions of the permit if they were not subject to the permit to begin with.

2. EPA's proposal to issue separate permits to satellite collection systems confirms that they are not part of the POTW

EPA cannot logically argue that "satellite collection systems" should receive separate NPDES permits if it maintains that the collection system is part of the POTW. In addition, if the collection system is part of the POTW it would be entitled to coverage under the existing bypass and upset regulations. On the other hand, if the collection system is separate from the POTW then it should not be subject to secondary treatment requirements. EPA has attempted to finesse this logical impasse by creating an entirely new definitional construct, in which the POTW "treatment plant" and the POTW "collection system" are both part of the larger definition of "POTW." Through this construct, both would be subject to the secondary treatment requirements, but only the POTW "treatment plant" would be covered by the traditional bypass and upset regulations. The POTW "collection system" is covered by the new prohibition against SSO discharges, along with the much more limited defenses that it allows.

As discussed below, neither the CWA nor the existing NPDES regulatory definition of POTW can support this novel refinement in regulatory definitions.

3. The definition of "treatment works" in CWA § 212 does not apply to the secondary treatment requirement in CWA § 301

CWA § 212 explicitly states that the definitions it contains are "as used in this subchapter." CWA Subchapter II deals with "Grants for the Construction of Treatment Works," and the definition of "treatment works" in that chapter was intentionally broad so that the federal grants program could provide financing for collection systems as well as for treatment plants. This broad definition does not apply to Subchapter III or to the secondary treatment requirement in § 301. The court in *Montgomery* explicitly held that the definition of treatment works in CWA § 212 was inapplicable to CWA § 301, noting that:

The legislative history also indicates that the broad definition of treatment works in section 212 was viewed as an expansion beyond the common meaning of the word, an expansion justified by the context of the federal grant authorization. . . . Approval of this new definition in the narrow context of construction grants was

not a determination that attaching a sewer system to a treatment facility would require secondary treatment at formerly independent overflow points.¹³

4. O&M requirements from the grants program no longer apply

The collection system requirements from the federal construction grants regulations were a one-time condition of the construction grants program, which was enforceable only as a condition of the grants themselves. In fact, in a footnote to its discussion of this point in the draft SSO rule, EPA itself acknowledges that “[i]n accordance with Section 602(b)(6) of the CWA, the Clean Water State Revolving Fund Program no longer contains Title II Construction Grant requirements.”

5. The definition of SSOs cannot be extended to discharges that do not reach waters of the United States

In crafting the prohibition section of the Draft SSO Rule, EPA recognized that it had no authority to prohibit discharges unless they actually reach waters of the United States. This is due to the statutory definition of what constitutes a “discharge,” which is the only thing prohibited by § 301 of the Act. CWA § 502(12) defines the terms “discharge of a pollutant” and “discharges of pollutants” to mean “any addition of any pollutant to navigable waters from any point source.” The term “navigable waters” is in turn defined in § 502(7) to mean “the waters of the United States, including the territorial seas.”

Despite this clear jurisdictional limitation, EPA argues that public recordkeeping and notification requirements “should be based on public health risks” and not on “an arbitrary distinction” between SSOs that do or do not go to waters of the United States.¹⁴ Despite its lofty goal, this unwarranted expansion of the Agency’s authority is clearly without legal authority. EPA also tries to suggest that overflows that do not reach waters of the United States “may” be an “indicator” of a violation of the standard permit condition requiring proper operation and maintenance, but this cannot justify the creation of a new set of recordkeeping and reporting requirements when the overflows themselves are not unlawful.

II. SSO Statutory and Regulatory Framework

This section sets forth the pertinent statutory and regulatory provisions that provide the basis for correctly defining the legal status of SSO discharges.

A. The CWA prohibits discharges not in compliance with specified provisions of the Act

CWA § 301(a) states that the discharge of any pollutant is prohibited “except as in compliance with law:”

¹³ 646 F.2d at 591.

¹⁴ Draft SSO Rule preamble at 184.

Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title,¹⁵ the discharge of any pollutant by any person shall be unlawful.

B. The CWA authorizes the issuance of NPDES permits “upon condition that such discharge will meet” all applicable CWA requirements

CWA § 402(a) authorizes the issuance of permits for any discharge that meets specified conditions of the Act:

Except as provided in sections 1328 and 1344 of this title, the Administrator may, after opportunity for public hearing issue a permit for the discharge of any pollutant, or combination of pollutants, notwithstanding section 1311(a) of this title, upon condition that such discharge will meet either (A) all applicable requirements under sections 1311, 1312, 1316, 1317, 1318, and 1343 of this title,¹⁶ or (B) prior to the taking of necessary implementing actions relating to all such requirements, such conditions as the Administrator determines are necessary to carry out the provisions of this chapter.

C. Point sources other than POTWs are required to meet BAT for toxic and nonconventional pollutants, and BCT for conventional pollutants

For “toxic” and “nonconventional” pollutants, all classes and categories of point sources other than POTWs are required to meet effluent limitations based on “best available technology economically achievable” (BAT). BAT may require the total elimination of all discharges only if such elimination is technologically and economically achievable. CWA § 301 states that there shall be achieved:

(2) (A) for pollutants identified in subparagraphs (C), (D), and (F) of this paragraph, effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which (i) shall require application of the best available technology economically achievable for such category or class, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(2) of this title, *which such effluent limitations shall require the elimination of discharges of all pollutants if the Administrator finds, on the basis of information available to him (including information developed pursuant to section 1325 of this title), that such elimination is technologically and economically achievable* for a category or class

¹⁵ 33 USC § 1312 (CWA § 302) deals with water quality related effluent limitations; § 1316 (CWA § 306) deals with national standards of performance for new sources; § 1317 (CWA § 307) deals with toxic and pretreatment effluent standards; § 1328 (CWA § 318) deals with aquaculture projects; § 1342 (CWA § 402) deals with NPDES permit requirements; and § 1344 (CWA § 404) deals with permits for dredged or fill material.

¹⁶ 33 USC § 1311 (CWA § 301) deals with technology-based and water quality-based effluent limitations; § 1318 (CWA § 308) deals with records, reports and inspections; and § 1343 (CWA § 403) deals with ocean discharge criteria.

of point sources as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(2) of this title (*Emphasis added*).

For “conventional pollutants” (which are defined in CWA § 304(a)(4) to include biological oxygen demand, suspended solids, fecal coliform, and pH), there shall be achieved compliance with effluent limitations which “require the application of the best conventional pollutant control technology as determined in accordance with regulations issued by the Administrator” (BCT).

D. The CWA requires POTWs to comply with “secondary treatment” and any more stringent state water quality standards

Pursuant to CWA § 301(b)(1)(C) and (D), publicly owned treatment works are required to achieve “effluent limitations based upon secondary treatment as defined by the Administrator pursuant to Section 1314(d)(1) of this title,” or “any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations”

There is no statutory definition of “publicly owned treatment works” in Title III of the CWA. The definition contained in Title II (CWA § 212) is referenced (but not explicitly reproduced) by EPA in its general pretreatment regulations,¹⁷ in a provision which is in turn cross-referenced in the NPDES permit regulations.¹⁸ As stated above, however, the definition in Title II does not apply to Title III, and the reference to this definition in the cited regulations is qualified by certain additional language that makes its applicability to SSOs a matter of dispute.

E. Secondary treatment is defined by EPA in 40 CFR Part 133

The secondary treatment regulations were promulgated by U.S. EPA in 1973,¹⁹ and subsequently amended in 1976, 1984 (twice), 1985 (twice) and 1989.²⁰ They are presently codified in 40 CFR §§ 133.100-105. Secondary treatment is defined “in terms of the parameters” BOD, SS and pH. The method of treatment to achieve the numeric effluent limitations for these parameters is not specified. 40 CFR 133.103 also contains several “special considerations” allowing relief from the percent removal and mass loading requirements for certain POTWs receiving wet weather flow from combined sewers (§ 133.103(a) and (e)), and for certain POTWs receiving “less concentrated influent wastewater for separate sewers” (§ 133.103(d)).

F. NPDES permit regulations governing “bypass” and “upset”

The NPDES permit regulations contain certain provisions applicable to all permits, including a qualified prohibition against “bypass” and an affirmative defense for “upsets.”

¹⁷ 40 CFR § 403.3(o).

¹⁸ 40 CFR § 122.2.

¹⁹ 38 *Fed. Reg.* 22298 (Aug. 17, 1973).

²⁰ 41 *Fed. Reg.* 30786 (July 26, 1976) (to remove the limits for fecal coliform); 49 *Fed. Reg.* 37006 (Sept. 20, 1984); 49 *Fed. Reg.* 40405 (Oct. 16, 1984); 50 *Fed. Reg.* 23387 (June 3, 1985); 50 *Fed. Reg.* 36880 (Sept. 10, 1985); and 54 *Fed. Reg.* 4228 (Jan. 27, 1989).

1. The “bypass” provision

40 CFR § 122.41(m) defines a “bypass” as “the intentional diversion of waste streams from any portion of the treatment facility.” Section 122.41(m)(2) states that “The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation.” For all other bypasses, § 122.41(m)(4) states that:

- (4) *Prohibition of bypass.* (i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
- (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The permittee submitted notices as required under paragraph (m)(3) of this section.

Whether or not the existing bypass provision applies to SSOs may depend on whether or not they are deemed to be a part of the “treatment facility.” This term is not defined in 40 CFR Part 122, but EPA has stated, in the *1989 CSO Control Strategy*, that “[t]he treatment facility begins at the headworks where equalization of the waste streams takes place.”²¹ Based on this interpretation, EPA suggests in the draft SSO rule that SSOs are not covered by the bypass provision because they are not part of the “treatment facility” even though they are part of the “POTW.”

2. The “upset” provision

40 CFR § 122.41(n) defines an “upset” as “an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee.” The definition of upset does not include noncompliance “to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.” 122.41(n)(2) provides that:

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

²¹ 54 *Fed. Reg.* 37370, 37371 (Sept. 8, 1989).

Whether the current upset defense can or should be extended to cover noncompliance with water-quality based effluent limitations as well as technology-based effluent limitations is discussed below.

III. *Alternative Approaches*

This section outlines several alternative approaches to the regulation of SSOs. Some approaches should be used in conjunction with others; some stand alone, but each one is superior to the absolute prohibition, or “zero discharge,” approach set forth in the Draft SSO rule.

A. Limited SSO authorization approach

The first of these alternatives is based on the proposition that SSOs can be authorized under existing law and are not required to comply with secondary treatment. Support for this proposition is found in the existing regulatory definition of “POTW,” and in the legal analysis set forth by the D.C. Circuit Court of Appeals in the 1979 *Montgomery* decision.

From 1973 through 1979, the NPDES regulations contained a definition of “treatment works” that included “any facility, method or system for the storage, treatment, recycling or reclamation” of sewage or wastes, “including waste in combined storm water and sanitary sewer systems.”²² However, this definition was replaced in 1979 with a definition of “Publicly Owned Treatment Works” as any device or system used in the treatment of liquid sewage or wastes, “excluding any sewers or other conveyances *not leading to* a facility providing treatment.”²³ In the consolidated permit rules issued the following year, the definition was “reworded” to state that it “includes sewers, pipes or other conveyances *only if they convey* wastewater to a POTW providing treatment.”²⁴ Thus, under the current regulatory definition, it can be argued that neither CSOs nor SSOs are part of the POTW since they do not convey wastewater to the POTW but instead result in a discharge prior to the POTW.

Shortly after the 1980 NPDES rule amendments described above, the D.C. Circuit ruled in the *Montgomery* case²⁵ that CSOs are not part of the “treatment works” under either the 1979 or the 1980 definition, and consequently they are not subject to the “secondary treatment” standards applicable to POTWs. U.S. EPA had previously expressed a similar view in a 1976 General Counsel Opinion,²⁶ which concluded that “treatment works” does not include CSOs whose purpose is not storage and treatment but simply to discharge when capacity is exceeded. In its briefs to the court in the *Montgomery* case, EPA argued “that a sewage overflow point is a device discharging sewer flow without treatment, and that it is therefore not a ‘treatment works.’” 646 F.2d at 590. The court found that this argument was “buttressed” by the 1979 regulatory definition of treatment works, and that the 1980 definition was “even more explicit in its denial of ‘treatment works’ status to overflow points.” *Id.*

²² 38 *Fed. Reg.* 13528 (1973), codified at 40 CFR § 125.1(hh) (1973).

²³ 44 *Fed. Reg.* 32854 (June 7, 1979) (emphasis added).

²⁴ 45 *Fed. Reg.* 33418 (May 19, 1980) (emphasis added).

²⁵ *Montgomery Environmental Coalition v. Costle*, 646 F.2d 568 (D.C. Cir. 1980).

²⁶ EPA General Counsel Opinion No. 48, *In re Richmond, Virginia* (June 30, 1976).

Since the *Montgomery* decision was issued in 1979, neither EPA nor the courts have formally determined that SSOs must be treated differently than CSOs. When the SSO Subcommittee first began its deliberations, EPA stated in a Nov. 28, 1994 "SSO Discussion Paper" that secondary treatment requirements did not apply to CSOs, but that EPA had "not clarified whether SSOs should be addressed in a similar or different manner." At that time there was considerable variation among that States and Regions in their interpretation of the legal status of SSOs. Many permits authorized SSO discharges when there were no feasible alternatives or when they resulted from circumstances beyond the control of the operator.²⁷ Other permits allowed SSO discharges when specific requirements were met, such as compliance with effluent limitations and/or monitoring and reporting obligations.

B. MOM can be BAT/BCT for SSOs if secondary treatment standards do not apply

If it is determined that SSOs are not part of the POTW, and that the CWA's secondary treatment requirements do not apply, then SSOs would be subject to the BAT and BCT requirements applicable to all other categories of point source discharges. Rather than establishing a set of numeric effluent limitations, BAT/BCT for SSOs would be defined as a set of Best Management Practices (BMPs), based on the MOM portion of the cMOM requirements proposed in the Draft SSO Rule. The use of such BMPs is authorized by 40 CFR § 122.44(k) where the imposition of numeric effluent limitations is infeasible.

CWA § 301 requires generally that discharges comply with "effluent limitations." CWA § 502 defines "effluent limitations" to mean any restriction on quantities, rates and concentrations of constituents discharged from point sources. Nowhere does the CWA say that effluent limitations must be numeric. EPA has confirmed this position in its "Questions and Answers Regarding Implementation of an Interim Permitting Approach for Water-Quality Based Effluent Limitations in Storm Water Permits."²⁸

EPA has, through regulation, interpreted the statute to allow for non-numeric limitations (*e.g.*, "best management practices" or BMPs, see 40 CFR 122.2) to supplement or replace numeric limitations in specific instances that meet the criteria specified at 40 CFR 122.44(k). This regulation essentially codifies a court case addressing storm water discharges. *NRDC v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977). In that case, the Court stated that EPA need not establish numeric effluent limitations where such limitations were infeasible.

40 CFR § 122.44 states that NPDES permits shall include, where applicable:

(k) *Best management practices (BMPs)* to control or abate the discharge of pollutants when:

²⁷ See, for example, the collection system permit for East Bank, West Virginia, included as Tab 7 in the December 1996 FACA briefing book, which provides that specified SSOs are subject to the bypass provision (but not the Upset provision) in the permit's standard conditions section. Unlike the federal rule, which states that bypasses are *prohibited* unless they meet certain conditions, the bypass provision in the permit begins by stating that "Bypass is permitted only under the following conditions"

²⁸ 61 *Fed. Reg.* 57425, 47426 (Nov. 6, 1996).

- (1) Authorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities;
- (2) Authorized under section 402(p) of the CWA for the control of storm water discharges;
- (3) Numeric effluent limitations are infeasible; or
- (4) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

Subsections (k)(3) and (4) could both be used to justify the application of cMOM-based BMPs in lieu of numeric effluent limitations for SSOs.

C. The cMOM approach can be adopted as a special form of Secondary Treatment for collection systems

Even if it is assumed that SSOs can only be authorized in NPDES permits so long as they comply with secondary treatment as well as water-quality based effluent limitations, there are several alternative approaches to establishing what secondary treatment means for the collection system, as distinct from the POTW.

1. MOM can be adopted as a “special consideration” approach under the existing secondary treatment regulations (see 40 CFR § 133.103)

If SSOs are determined to be part of the POTW and therefore subject to the secondary treatment requirement in CWA § 301, a defined set of Management, Operation and Maintenance requirements could be established as a “special consideration” under the existing secondary treatment regulation in 40 CFR 133.103. This rule already contains a provision, in subparagraph (e), covering “less concentrated influent wastewater for separate sewers.” If necessary, and additional subparagraph could be added to the rule stating that municipal sanitary collection systems which are in compliance with the applicable MOM requirements (and are implementing a capacity assurance plan, if needed) are in compliance with the technology and water-quality based requirements of the CWA.

2. MOM can be adopted as a new subcategory of secondary treatment by re-opening the secondary treatment regulations

As a second, and more cumbersome alternative, the secondary treatment regulations could be reopened for EPA to establish appropriate CMOM requirements for sanitary sewer collection systems as a separate subcategory in EPA’s definition of what constitutes secondary treatment. CWA § 301 requires POTWs to meet secondary treatment “as defined by the Administrator pursuant to section 1314(d)(1) [CWA § 304(d)(1)] of this title.” Section 304 requires the Administrator to publish information “in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, on the degree of effluent reduction attainable through the application of secondary treatment.” It also directs the Administrator to provide guidance on the design criteria for certain types of facilities that are deemed the “equivalent” of secondary treatment.

In 40 CFR § 133.102, EPA defined secondary treatment for POTWs in terms of the parameters BOD₅, SS and pH. In a revised secondary treatment regulation, EPA could amend this section to define secondary treatment for collection systems in terms of compliance with specified CMOM requirements.

D. EPA can provide an affirmative defense for unavoidable SSOs

Even if SSOs are not authorized pursuant to one of the options outlined above, EPA can still provide a more effective affirmative defense for unavoidable SSOs than those contained in the draft SSO rule (which are so severely limited that they provide no realistic protection to the collection system operator).

1. The courts have held that EPA must provide an upset defense for technology-based effluent limitations, and must permit certain unavoidable bypass.

Both the Fourth and Ninth Circuit Courts of Appeals have ruled that EPA must provide some form of “excursion” or “upset” provision, to protect against violations of technology-based effluent limitations based on unavoidable failures of the underlying technology. *FMC Corp. v. Train*, 539 F.2d 973 (4th Cir. 1976); *Marathon Oil v. EPA*, 564 F.2d 1253 (9th Cir. 1977). The *Marathon* decision also concluded that EPA must “allow” or “permit” certain bypasses when they are unavoidable to prevent severe property damage. The *Marathon* case was cited by EPA as the basis for its adoption of the original bypass and upset provisions. See 43 *Fed. Reg.* 37078, 37079 (Aug. 21, 1978).

2. The D.C. Circuit has held that EPA may, but is not required to, apply the upset defense to exceedances of water quality based limits

The bypass and upset provisions in the NPDES permit rules were originally proposed on Aug. 21, 1978,²⁹ and adopted on June 7, 1979, 49 *Fed. Reg.* 37998. They were appealed in a number of petitions, which were eventually consolidated as *NRDC v. EPA*, No. 80-1607 (D.C. Cir., filed June 2, 1980). After two years of negotiations, a settlement was reached on June 7, 1982, covering 27 of 42 issues raised in the appeals. Amended regulations were proposed on Nov. 18, 1982, 47 *Fed. Reg.* 52072, and issued as final on September 26, 1984.³⁰ This proposed rule would have removed the “essential maintenance” restriction on bypasses not exceeding effluent limitations, and it would have expanded the upset provision to cover noncompliance with water quality based effluent limitations. The final rule, however, reverted to the Agency’s original position on both issues. In 1987, the D.C. Circuit upheld the final bypass prohibition, stating that:

In view of the Act’s ambitious policies, we cannot say that the Act requires EPA to allow bypasses which are not provided for in the permit and which are unnecessary for essential maintenance purposes or to avoid harm to life or property.³¹

²⁹ 47 *Fed. Reg.* 52072.

³⁰ 49 *Fed. Reg.* 37998.

³¹ *NRDC v. EPA*, 822 F.2d 105, 124 (1987).

In response to the contention that hydraulic flooding resulting from heavy rainfall may damage the system or render it inoperative, the court interpreted the rule to provide that, under such circumstances, "even a bypass which exceeds effluent limitations would be permitted if it was unavoidable to prevent severe property damage."³² Although "Congress did not specifically address the question whether bypasses may be permitted," the court concluded that:

The Agency's adoption of a bypass regulation which incorporates two broad and sensible exceptions (bypasses which do not cause effluent limitations to be exceeded for purposes of essential maintenance and bypasses which may cause effluent limitations to be exceeded in order to avoid personal injury or severe property damage) is, in our view, reasonable and therefore lawful.³³

The next year, the D.C. Circuit considered EPA's failure to extend the upset defense to non-compliance with water quality-based limits.³⁴ The court endorsed the Ninth Circuit's decision in *Marathon Oil* that an upset defense was required for technology-based permit limitations, since "no pollution technology works perfectly all of the time." However, it concluded that the Act does not require EPA to provide a similar defense for water quality-based limitations, and that it was within the Agency's discretion whether or not to allow such a defense in situations where the permittee could show that water quality standards were maintained in all stream segments affected by the upset:

Indubitably, the Act requires overall water quality to be maintained, and even though an individual permit violation may not always produce an infringement of water quality standards for a particular body of water, the agency is at liberty to make the regulatory judgment not to allow permittees to assert an upset defense.³⁵

Because EPA had not adequately explained its decision to eliminate the defense from the proposed rule, the court remanded the issue for further proceedings by the Agency. In doing so, however, the court emphasized that EPA was not required to permit the defense, and that, if it did, EPA "has authority to determine in the first instance what constitutes sufficient proof that water quality was maintained during an upset."³⁶ EPA has never acted on this remand, and the applicability of the upset defense to non-compliance with water-quality based effluent limitations remains unresolved.

The *Marathon* and *NRDC* decisions chart the legal boundaries of EPA's duty and authority to provide defenses under the Act. The Agency *must* provide some form of excursion or upset defense for technology-based limits (presumably including secondary treatment requirements), and it *may* provide an upset defense for non-compliance with water quality-based permit limits if overall water quality is maintained. Furthermore, it is reasonable and lawful (and, arguably, required) for the Agency to "allow" or "permit" bypasses for essential maintenance that do not

³² *Id.* at 125.

³³ *Id.* at 126.

³⁴ *NRDC v. EPA*, 859 F.2d 156, 206-07 (1988).

³⁵ *Id.* at 209.

³⁶ *Id.* at 210.

cause effluent limitations to be exceeded, and bypasses that are necessary to avoid personal injury or severe property damage even if they cause effluent limitations to be exceeded. The protection afforded by the existing bypass provision is not limited to exceedances of technology-based effluent limitations, but covers water quality-based limits as well.

The availability of such defenses is not dependent on whether or not the collection system is part of the POTW, since the legal rationale applies to unavoidable exceedances of any technology-based standard, whether it is secondary treatment or some other BAT/BCT effluent limitation. However, if a separate BAT/BCT standard is applied to SSOs, the current NPDES permit regulations would have to be modified, either to expand the application of the existing bypass regulation or to create an equivalent provision for SSOs. The existing bypass provision applies to the intentional diversion of waste streams from “any portion of the treatment facility.” (The upset provision is not similarly restricted.) In the 1989 *CSO Control Strategy*, consistent with the *Montgomery* decision, EPA stated that since CSOs are not part of the POTW the bypass provision would not apply. Similarly, if SSOs are separated from the POTW, the existing bypass defense would become unavailable unless it is amended.

3. Potential drawbacks to use of the existing bypass defense

With regard to the condition in the existing bypass rule that there must be “no feasible alternative” to a bypass, recent court decisions have suggested that the hypothetical ability to construct a larger treatment facility or to rehabilitate the entire collection system may eviscerate the existing defense.³⁷ However, these cases must be understood in their procedural context. In the *Toledo* case, the same court had previously refused to grant summary judgment on the government’s theory that any bypass which occurred when the treatment plant was operating at less than its design capacity was, as a matter of law, not entitled to the bypass defense.³⁸ The later opinion was a ruling on a joint motion for decision of a legal issue, which held that “feasible alternatives” may include the construction of additional facilities. It did not grant summary judgment on the issue of liability. Instead, consistent with the court’s earlier ruling, it laid the foundation for an evidentiary hearing on the issue of “feasibility.” Thus, the court never determined (1) whether some bypasses that occurred at less than plant capacity were “unavoidable” to prevent severe property damage, or (2) how much it would have been “feasible” for the city to spend on additional treatment or storage capacity.

E. The “impossibility” defense

An affirmative defense against the prohibition of SSO discharges might also be based upon the principle expressed in the ancient legal maxim *lex non cogit ad impossibilia* (Hob. 96) or *lex non intendit aliquid impossibile*, meaning that “the law does not compel the doing of impossible acts.” The principle is applied in the interpretation of statutory provisions that would otherwise compel an impossible result.³⁹ In *Hughey v. JMS Dev. Corp.*, 78 F.3d 1523 (10th Cir. 1996) this principle was applied to the “zero discharge” standard of the CWA (*i.e.*, no discharge without a

³⁷ Cf. *United States v. Penn Hills*, 46 ERC 1279 (W.D. Pa. 1998); *United States v. City of Toledo*, No. 3:91CV7646 (N.D. Ohio Aug. 6, 1999).

³⁸ *United States v. City of Toledo*, 867 F. Supp. 603 (N.D. Ohio 1994).

³⁹ *Chew v. Heong*, 112 U.S. 536 (1884).

permit), because “Congress could not have intended a strict application of the zero discharge standard . . . when compliance is factually impossible.” Thus, a local developer was held not liable for stormwater discharges that occurred when no stormwater permit was available from the relevant permitting agency. The court held that:

. . . Congress did not intend (surely could not have intended) for the zero discharge standard to apply when: (1) compliance with such a standard is factually impossible; (2) no NPDES permit covering such discharge exists; (3) the discharger was in good-faith compliance with local pollution control requirements that substantially mirrored the proposed NPDES discharge standards; and (4) the discharges were minimal.⁴⁰

The so-called “*Hughey* exception” to the zero-discharge standard was subsequently recognized by the U.S. District Court in Minnesota (in spite of opposition by U.S. EPA),⁴¹ and affirmed by the Eighth Circuit Court of Appeals.⁴² In its decision, the Eighth Circuit noted that cities cannot stop rain and snow from falling, and any attempt to prevent discharge through established storm drains would actually cause harm to public health and the environment. In these circumstances, the court held “as a matter of law” that the plaintiffs could not obtain an award of civil penalties against the cities for their unpermitted stormwater discharges.

IV. Conclusion

This *White Paper* reveals that with some fresh thinking and approaches, a sensible approach to SSO regulation can be developed and implemented. AMSA continues to support EPA’s development and finalization of a national regulatory program for SSOs. It is our hope that as this program is developed, that legal and regulatory precedent will be used to support a practical and effective program.

⁴⁰ 78 F.3d at 1530.

⁴¹ *Mississippi River Revival v. EPA*, 107 F. Supp. 2d 1008, 1014 (S.D. Minn. 2000).

⁴² *Mississippi River Revival, Inc. v. City of Minneapolis*, 319 F.3d 1013, 1017-18 (8th Cir. 2003).