Statement of
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Good morning Mr. Chairman and members of the Subcommittee. I am Robert W. Varney, the Regional Administrator of the Environmental Protection Agency's New England Office, Region I. I appreciate the opportunity to discuss with you EPA's enforcement and compliance program here in New England. My remarks will focus primarily on our work ensuring compliance with the Clean Water Act and the results we are achieving. I will also touch on our use of integrated strategies - combining assistance, auditing, incentives and enforcement - to achieve greater levels of compliance across all the environmental statutes.

Clean Water Act Compliance Challenges in New England

The most significant environmental and public health challenges that we face in New England under the Clean Water Act remain in the area commonly referred to as "wet weather." From combined sewer overflows (CSOs) to sanitary sewer overflows (SSOs) to storm water, discharges following rain events are reportedly a significant cause of stream and river impairment and beach and shell fishing closures across New England. For these reasons, the Region has devoted substantial enforcement effort to addressing these violations.

CSO and SSO cases can be very resource-intensive to develop, litigate and resolve. This is due to a number of factors. Necessary injunctive relief can be complex, requiring expenditure

by municipalities of many millions of dollars. In addition, enforcement actions routinely require submission of numerous engineering reports to EPA and states requiring technical review. As a result, although Region I and the New England states have made substantial progress in the area of CSOs and SSOs, much additional work needs to be done.

The Region prioritizes wet weather work – particularly CSO and SSO cases – above some of the other types of violations tracked in EPA's national "Significant Non-Compliance" or "SNC" rates. In the Region's experience, the environmental problems caused by some wet weather violations in New England have posed greater risks to the environment than some of the traditional SNC cases. This is due to weather patterns in New England, as well as the fact that New England has old, urban areas with aging infrastructure. We recognize that in other areas of the country, different issues may pose more serious environmental problems. The Region's approach has been to evaluate continually both SNC and wet weather violations and to focus our resources on those violations where environmental impact is the most significant on the residents and resources of New England.

Work to Address CSOs

Combined sewer systems (CSSs) are remnants of the country's early infrastructure found in the Region's older cities and towns. As New England has some of the oldest communities in the country, it also has a relatively high number of communities serviced by CSSs. More specifically, there are approximately 120 CSO communities in New England; these systems have a total of over 990 outfalls.[1]

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[1]The number of CSO communities and outfalls are subject to change as communities progress with CSO control projects. With regard to the number of outfalls, the Region considers

As a result of efforts by Region I and the New England states, nearly every New England CSO municipality is implementing system management controls and all significant dischargers are either planning, implementing or have completed CSO mitigation. A CSS may include as few as one outfall to more than one hundred outfalls. The Region and the states have focused enforcement on the more complex problems. Of the 120 CSO communities in New England, over 80 have been addressed by an administrative or judicial enforcement action. The Region has taken the lead in 26 of these actions; the states have handled the others. As a result, these enforcement actions are addressing more than 80% of the CSO outfalls in the Region. Most CSO communities that are not subject to enforcement are addressing CSOs informally by separating their CSSs into distinct sanitary and storm lines.

In FY02, for example, the Region issued enforcement actions requiring the preparation or implementation of long-term controls plans which have resulted, or will result, in significant reductions in the frequency and levels of CSOs to surface water. This work included issuance of administrative orders to the following communities: Fitchburg, Massachusetts; Haverhill, Massachusetts; Greater Lawrence Sanitary District, Massachusetts; Lowell, Massachusetts; Springfield, Massachusetts; Worcester, Massachusetts; Manchester, New Hampshire; and Portsmouth, New Hampshire.

CSO cases continue to involve EPA oversight and involvement for years after the enforcement action is issued. In addition to issuing new actions in 2002, for example, Regional staff also were involved in reviewing and commenting on long-term control plans or other deliverables required by orders or consent decrees from the following communities: Chicopee,

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outfalls as existing until permanently capped or otherwise eliminated.

Massachusetts; Gloucester, Massachusetts; Greater Lawrence Sanitary District, Massachusetts; Haverhill, Massachusetts; Lowell, Massachusetts; Massachusetts Water Resources Authority, Massachusetts; Portsmouth, New Hampshire; and Nashua, New Hampshire. These reviews involve complex engineering solutions to environmental problems that will result in significant expenditures by municipalities and sewer authorities.

In its application of the National Combined Sewer Overflow Policy, the Region strives to implement a results-oriented, flexible approach. For instance, the Region does not mandate a preferred set of technologies that a municipality should use to address CSO issues. Rather, through its enforcement actions, the Region allows a community to develop abatement programs tailored to its individual circumstances. Provided that communities are making solid progress within time frames the Region agrees make sense, the Region allows communities to select the most appropriate resolution to CSO problems from a variety of approaches. The Region also recognizes that a community's knowledge about its sewer system often develops through the course of abatement work. This is due not only to the fact that collection systems are underground and therefore not readily observed, but also because the systems in New England are old and historical mapping is often unavailable. As a result, the Region often phases work required under CSO enforcement actions so that communities can build upon knowledge gained about their systems during initial stages. The Region is amenable to communities recommending modifications to abatement plans based on new information as long as equivalent or better environmental protections are guaranteed.

A recent example of the Region's approach regarding CSO enforcement is with Nashua, New Hampshire. Pursuant to an administrative order issued in 1999, Nashua began to

completely separate its CSS. While undertaking this work, the City also engaged a consultant to re-evaluate its CSO abatement plan. In 2003, Nashua submitted an alternative CSO control plan which proposed construction of storage and treatment facilities that would capture and/or treat not only sanitary sewage but also storm water run-off. Under complete separation, all of the storm water would have been discharged to surface waters. The plan predicted that the projects would control wet weather combined flows for up to the two-year storm at all but one outfall where Nashua would provide treatment for flows up to the largest storm in a typical year. EPA and New Hampshire agreed that the plan was a good first step. Accordingly, EPA issued a new order requiring implementation of these projects in lieu of complete separation. After the recommended projects are implemented, monitoring will be necessary to evaluate the level of CSO control achieved and to determine appropriate next steps.

Work to Address SSOs

Overflows of sewage from separate sanitary systems also are a Regional enforcement priority. New England communities serviced by separate sanitary sewer systems may also experience unauthorized overflows of untreated or partially-treated sewage as a result of inadequate maintenance of aging sewer systems or insufficient capacity.

Historically, the Region has taken civil judicial enforcement actions against municipalities with chronic SSO problems. Recent actions included the following:

$ Greenwich, Connecticut. Judicial consent decree provides for payment of $285,000 in civil penalties and injunctive relief.

$ Winchendon, Massachusetts. Judicial consent decree provides for payment of $45,000 in civil penalties and injunctive relief.

$ Waterbury, Connecticut. Judicial consent decree provides for payment of $300,000 in

civil penalties and injunctive relief.

The Region worked closely with the State of Connecticut and the Commonwealth of Massachusetts in developing these actions. Connecticut and Massachusetts joined each of the actions as co-plaintiff.

Work to Address Pollutants in Storm Water

Storm water is an area in which the Region has worked to integrate compliance assistance and enforcement. Several years ago, the Region initiated enforcement focusing on violations of the "Phase 1" storm water rules by industries and developers. These enforcement efforts have continued. In FY02 and FY03, for instance, the Region resolved four administrative penalty actions against developers and one judicial action against a sand and gravel company. The enforcement actions included the following:

$ V&G Building Development Corporation: This action involved a 164-acre residential development in Methuen, Massachusetts. The settlement required payment of a $50,000 penalty.

$ Mesiti Development Corporation: This action involved a 112-acre residential development in Salem, New Hampshire. The settlement required payment of a $75,000 penalty.

$ Lowes Corporation. This action involved Lowes' sites in Woburn, Danvers, Brockton and East Springfield, Massachusetts. The settlement required payment of a $137,500 penalty.

$ Bestech, Inc., et al. This action involved a commercial development in Chicopee, Massachusetts. The settlement required payment of a $42,000 penalty.

$ Boston Sand & Gravel, Boston, Massachusetts. The Region brought a civil judicial action against Boston Sand & Gravel for violations of industrial storm water requirements at several facilities in the Boston area. The consent decree required payment of a $898,000 penalty and a $500,000 supplemental environmental project that will eliminate discharges of process water from one of the company's facilities.

Based on our experience enforcing the Phase 1 requirements and recognizing that Phase 2 would regulate for the first time hundreds of municipalities and small construction projects, the Region decided to launch an extensive program of outreach and assistance prior to the effective date of the Phase 2 regulations. Regional staff reached hundreds of affected sources through workshops, fact sheets, mass mailings, and other forms of communication to those regulated by these new and expanded requirements. Through this outreach, we aim to increase our target audiences' awareness of EPA's role in storm water permitting, the relationship between the federal program and other state and local storm water programs, and why controlling storm water impacts is environmentally important.

Our assistance work has primarily been focused in New Hampshire and Massachusetts, the two New England states that are not authorized to administer the NPDES program. The Region also has cooperative relationships with the other four New England states. Our assistance is focused on those most affected by these new requirements, especially:

$ ***Small MS4s (municipal separate storm sewer systems) that need to develop programs.*** Approximately 300 communities in MA and NH, where EPA NE is the permitting authority, needed to apply for permit coverage by July 31, 2003, and to develop storm water management programs over the term of the permit. We have already determined that 90% of regulated MS4s filed applications by the deadline; such a high compliance

rate can certainly be partly attributed to outreach.

$ ***Small municipal and private construction projects that need to control construction runoff.*** Previously, the regulations applied to projects affecting more than 5 acres; the Phase 2 rules lowered the regulatory threshold to projects affecting more than one acre, making many more construction projects subject to these requirements. The permit issued pursuant to these new rules became effective July 1, 2003 in New Hampshire and August 4, 2003 in Massachusetts.

$ ***Municipal, state, and federal governments that must control runoff from their "industrial" facilities.*** "Industrial" operations owned by governments, like municipal wastewater treatment plants and transfer stations, were required to apply for coverage or seek a "No Exposure" exemption by March 10, 2003.

Examples of the kinds of work we have done for these groups include: the creation and distribution of a model storm water plan for wastewater plants; workshops for wastewater treatment plants, highway garages and the construction sector; publication of articles in trade journals for the construction industry; development of materials to help contractors and developers determine which state and federal storm water permits they require; gathering and packaging storm water data to three low-income communities (Lawrence, Holyoke and Chicopee, Massachusetts) to help them implement programs designed to detect unauthorized connections of sanitary pipes to municipals storm sewers and establishing a "virtual trade show" of innovative storm water management technologies on our regional web site.

As the Phase 2 requirements come into effect, the Region will turn to enforcement of the

rules. We also will continue to enforce the Phase 1 requirements.

Clean Charles 2005 Initiative

In the Charles River basin, we have pioneered a results-oriented approach that combines our experience in the areas of CSOs and storm water. The Charles River is a symbol of Boston and is used by many thousands of people, but the quality of its water has been badly degraded. In 1995, EPA set a goal of making the lower Charles River fishable and swimmable by Earth Day 2005, and we have measured our progress on a monthly basis since. When the initiative started, the River met bacterial standards for swimming and boating just 19 and 39% of the time. It is now meeting those standards roughly 40 and 90% of the time. We have eliminated a wide range of pollution sources using a broad assortment of tools.

Enforcement has played a key role in this effort. For example, we took a series of enforcement actions to address illicit sewage discharges into storm drains. These actions have stopped the discharge of more than one million gallons of sewage per day into the River. We are also using enforcement to deal with combined sewer overflows from Boston and Cambridge. As a result of CSO enforcement, sewage loads to the lower Charles have been reduced from 1.7 billion gallons a year in 1988 to one tenth that amount in 2002.

While enforcement has been at the core of our strategy, we have also provided compliance assistance and built partnerships with local activists, municipalities, industry, and environmental groups. Some problems can be addressed more effectively through such partnerships, or through a combination of enforcement and compliance assistance. For example, a local citizen regularly kayaks the river and reports illicit discharges, otherwise difficult to detect, to EPA. MIT, a partner in our effort, hosted a storm water control design contest and constructed the winning design, bringing attention to simple steps that can be taken by

individuals in an urban setting to improve water quality. We encouraged the local municipalities to develop state of the art storm water management plans by providing the services of an expert consultant. And we are using innovative approaches to enhance the impact of our enforcement efforts. For example, by publicizing a Charles River inspection sweep two months before it was conducted, we generated a dramatic surge of compliance activity at hundreds of facilities – far more than we could have ever inspected.

Our Charles River work is driven by the need to produce real environmental results. We continually monitor water quality data, and adjust course as necessary based on trends in that data. This results-focused, multi-tool approach – integrating enforcement with other tools to achieve the best environmental result – has been adopted in other watersheds across the country.

Boston Harbor Cleanup

The Region's enforcement efforts related to water pollution in Boston Harbor reflect the Region's commitment to using traditional enforcement tools where necessary to resolve significant environmental problems. The Region's involvement in the Boston Harbor litigation did not end with the construction of the Deer Island wastewater treatment plant. The case, initiated in 1985, resulted in the Massachusetts Water Resources Authority (MWRA) spending $4.5 billion dollars to bring the MWRA closer to compliance with the Clean Water Act. Approximately $4 billion has been spent on the treatment plant and a 9.5 mile effluent tunnel. Prior to the new plant, the Metropolitan District Commission operated a primary plant, but then dumped the sludge back into the harbor.

The results have been significant:

X During dry weather, the Boston metropolitan sewer system is no longer the largest source

of contaminants in Boston Harbor.

X The amount of solids discharged has decreased by 80%.

X Most of Boston's outer harbor now meets water quality standards for bacteria. Boston's beaches are now safe for swimming between 86% and 96% of the time.

X Levels of lead and other heavy metals in sediments are now roughly half of what they were 20 years ago.

X Fish and other wildlife populations are now healthier.

The MWRA will spend more than $600 million on combined sewer overflows (CSOs). In the late 1980s, there were 88 CSOs discharging 3.5 billion gallons of untreated mixture of sewage and stormwater annually. By 2008, the MWRA intends to close 36 outfalls, eliminate the discharge of 3.1 billion gallons of untreated wastewater, and treat 95% of the remaining flow. Achievements include:

X Shell fishing, on a "conditional" basis, is now permitted along the South Boston and Dorchester shorelines. Previously, these areas were considered "prohibited" and the goal is "unrestricted."

X For the last three years, the City of Boston has hosted a national triathlon on Labor Day weekend with the swim portion in the Inner Harbor near the World Trade Center.

X The once forgotten Fort Point Channel has recently become a focus of residential and business groups as an area to be developed for recreational, arts, and commercial development for both residents and as a tourist attraction.

Assistance Work & Integrated Strategies

In addition to its traditional enforcement role, EPA's work in New England focuses on

practical problem-solving strategies that incorporate all of our tools and resources. Enforcement is one of these tools, as is assistance. Our goal is to develop strategies integrating our compliance assistance and enforcement programs to yield maximum environmental impact. This is an application of what my colleague JP Suarez refers to as Smart Enforcement. To accomplish this, we have developed a unique organization in this Region that is proving to be a model for others. This model is found in our regional Office of Environmental Stewardship which consolidates the efforts of our Enforcement and Pollution Prevention Offices. While separate from each other, these two Offices also work closely together to develop strategies that integrate enforcement and assistance approaches. We've found that this combination of "carrots and sticks" can be very effective. Two examples of the Region's integrated strategy approach include the College and University Initiative and the Department of Public Works Initiative.

There are significant reasons for concern about compliance at Colleges and Universities (C/Us). Most colleges and universities are analogues of small cities encompassing myriad activities within their campus borders. These activities include operating research laboratories, medical facilities, auto repair facilities, power plants, wastewater treatment plants, disposing of hazardous and solid wastes, supplying drinking water and maintaining campus grounds. Thus, colleges and universities must grapple with a wide range of environmental issues to protect the health of their communities and comply with the law. However, unlike the typical municipality, most have no central authority coordinating environmental practices.

In 1999, to help colleges and universities address the problems that we were finding through inspections and enforcement activities, the Region designed a phased strategy

integrating its ongoing enforcement activities with a program providing assistance to the college and university community. The Region sponsored multimedia workshops focusing on compliance issues that colleges and universities face daily. At the workshops, EPA highlighted specific historical problems that this sector has encountered, and been cited for, in enforcement inspections. We went on to create a website specifically tailored to the needs of the sector. The web page tracks EPA's objectives for all program phases. It allows colleges and universities to search for information tailored to their assistance needs -- from basic regulatory compliance to best management practices to sustainability concepts. In August 2003 alone, we had over 10,000 hits on our C/U web site. Our work also goes beyond compliance, and we are now working with many campuses on development of Environmental Management Systems, web-based assistance tools, energy efficiency and waste reduction programs, and, most recently, homeland security methods. Many of these efforts are documented on our web site as "best management practices."

Perhaps the most significant aspect of our C/U initiative was the Self-Audit Initiative. Under this program, we invited C/Us to voluntarily discover, disclose, and correct violations. In return, EPA eliminates or substantially reduces fines for violations that were disclosed or corrected during the audit. EPA added an extra incentive for facilities that participated in the initiative – giving them a low inspection priority status for a set period of time. Out of a total of 331 C/U facilities in New England, 176 participated. This strategy maximized voluntary compliance in the Region using a relatively small investment of resources. We do not believe we would have gotten this rate of participation or compliance without the integration of both our enforcement and assistance activities.

We have a similar strategy for municipal Departments of Public Works (DPWs). There are 1500 DPWs in New England, and many are in serious noncompliance with environmental

laws. Our inspections of these facilities have revealed improper handling and storage of hazardous wastes, storm water violations and unpermitted discharges of wastewater to ponds and streams. Launched after several highly publicized enforcement actions against municipal highway garages, this initiative was created to help municipalities comply with environmental requirements by also offering them greatly reduced penalties and low inspection priority. More than 320 facilities participated, conducted self-audits and corrected significant numbers of violations. This response far exceeded our expectations. As with colleges and universities, we believe both enforcement and assistance were needed to make this effort so successful.

Sector Based Strategy: Marinas

Marinas are a sector with obvious potential to impact surface water sources. We have initially approached this sector with assistance tools. In New England, more than 1,000 marinas repair, store, maintain and fuel water craft. These activities can present a number of significant environmental issues, including point and non-point source pollution from storm water contaminated by marina operations; spills and emissions from fuel and oil; and generation of hazardous waste from paints, solvents, degreasers, oils, and fuels.

Marinas often lack the environmental expertise and resources to achieve high environmental standards. This problem is compounded by the decentralized and fragmented nature of marina regulations. To help remedy this situation we developed an assistance initiative to improve marina environmental compliance and to promote best management practices.

To help evaluate performance under this effort, we developed a statistically-valid measurement approach, featuring on-site marina assessment surveys that measure key environmental compliance requirements and desired best management practices. The initial

baseline measure, which was completed in 2001, confirmed the existence of many problems identified earlier. Some of the work we have done in response includes the following: development of guidance documents to help marinas understand their environmental requirements and implement best management practices; completion of environmental workshops for marina owners in each state; formation of a regional marina workgroup to provide stakeholders a forum for improved communications; and creation of a regional marina website.

In addition, we collaborated with EPA Region 2 and marine industry stakeholders from New England and New York to launch a New England Clean Marine Engine Initiative. As part of this effort, participating organizations agreed to encourage customers to purchase and use lower-pollution marine engines in New England and in the Lake Champlain area. We now have 130 retailers participating in this initiative, and they have reported sales in 2002 of over 1,700 low pollution engines. Using our program as a model, EPA Region 2 has expanded it to New Jersey and Long Island.

Our enforcement office has followed these assistance efforts by conducting inspections at marinas.

Conclusion

We have made tremendous progress in improving the quality of New England's streams, rivers and estuaries over the past thirty years. Still, numerous challenges await us, particularly those related to municipal infrastructure and storm water. We are resolute in setting appropriate environmental and public health targets and moving steadily, though flexibly, towards them. Working in concert with the New England states and municipalities, we will continue to make the kind of progress elsewhere that we have already seen in Boston Harbor and are seeing in the lower Charles River.

This concludes my prepared remarks. I would be happy to address any questions you may have at this time.