Regional Plan

Region 2 Strategic Plan for 2004-2008

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Message from the Regional Administrator

I am pleased to submit the Region 2 Strategic Plan for 2004-2008. This Regional Plan provides environmental priorities and strategies that we will use to meet the goals and objectives of the Agency Strategic Plan.

The successful implementation of environmental protection programs in the Region has always involved a strong partnership with our States, Territories and Indian Nations. During the development of the Regional Plan we coordinated with the Environmental Commissioners of New York and New Jersey, and representatives from the environmental agencies of Puerto Rico, the U.S. Virgin Islands, and the Indian Nations, to discuss the planning process and request input on their respective environmental priorities. As we move forward with the implementation of this plan, we will continue to work closely with our partners, build on our existing collaborative efforts, and communicate our progress as effectively as possible to the people whom we serve.

Jane M. Kenny, Regional Administrator April 21, 2004

Executive Summary

This Strategic Plan sets out EPA Region 2's goals for the next five years and describes how we intend to achieve a cleaner, healthier environment. The strategies, tools and programs highlighted in the Plan to achieve the five national goals of Clean Air and Global Climate Change, Clean and Safe Water, Land Preservation and Restoration, Healthy Communities and Ecosystems, and Compliance and Environmental Stewardship, have been developed with the input of our partners in the state environmental agencies and Indian Nations. In addition to these important partnerships, Region 2 engages in significant collaborative efforts with other federal agencies, local governments, non-governmental organizations, the regulated community and other entities. Several examples of collaborative efforts described in Chapter 3 of this Plan have enabled us to achieve important milestones in protecting air, water, and land resources, and serve as useful models that we believe can be applied elsewhere.

With respect to clean air and global climate change, air quality in Region 2, as in most industrialized areas, is affected by emissions from automobiles, manufacturing, utility plants, refineries, and other mobile and stationary sources of pollution. While most of Region 2 meets the national ambient air quality standards, the Region's more densely populated areas exceed the standards for carbon monoxide, ozone and particulate matter. To address this issue, the Region has placed a priority on gathering air quality data from a number of neighborhoods, and has instituted a Clean School Buses Initiative that is protective of children's health. Further, the rebuilding of lower Manhattan has provided opportunities to use low emission technologies on diesel engines; the Region is very involved in promoting retrofit programs for construction equipment and passenger ferries.

Under the clean & safe water goal, we consider our two biggest challenges to be the improvement of water quality on a watershed basis and meeting health based standards to achieve safe drinking water. To improve our watersheds, the region will continue to emphasize increasing the number of TMDLs developed and approved per the tools and programs discussed in subobjective 2.2.1 of Chapter 2. With respect to drinking water, the Region will have difficulty achieving the national target for meeting health based standards, but will use tools available to assure that violations are addressed through appropriate enforcement action requiring correction as identified in subobjective 2.1.1. of Chapter 2.

The Region's efforts to preserve and restore land are focused in the areas of reducing waste generation and promoting recycling. Region 2 has developed unique relationships with our states, state

organizations, local universities and local governments that have allowed us to participate in over 60 projects designed to reduce waste generation and increase recycling. Several of our divisions working together are developing specific goals for individual waste streams dealing with reduction, re-use and recycling. Region 2 is working on projects addressing a number of the specific waste streams discussed in subobjective 3.1.1 of Chapter 2, including electronics, hospital wastes, mercury, lead, construction and demolition debris.

With respect to the Region's clean up and reuse of contaminated land, our Region 2 Superfund Program follows the national strategy to accomplish site clean up. Of the Region's 255 Superfund sites and four proposed sites, 120 sites (46%) have been cleaned up and deleted from the National Priorities List or have all construction completed and are undergoing long-term remediation. Cleanup activities including either design or construction, or investigations or studies are under way at approximately 139 sites. We are also devoting a very significant effort to ensuring that human health exposures and exposures through groundwater contamination at RCRA corrective action sites are being controlled, in accordance with the Agency's Environmental Indicator targets under the Government Performance and Results Act (GPRA).

Region 2 continues to support the national priorities identified by the Office of Enforcement and Compliance Assurance (OECA). The Region has focused on maintaining a viable core program in the non-delegable programs and maintaining oversight of delegated state enforcement programs. We have numerous regional initiatives associated with environmental risks, as well as compliance concerns covering a wide range of enforcement activities. We continue to maximize compliance and deter future non-compliance using various tools such as consent decrees, administrative orders, monetary penalties, notices of violation, and civil referrals. We expect this approach to environmental protection will be a vital component of the Region's enforcement and compliance program for the foreseeable future.

In the area of compliance assistance, the Region provides educational tools and other support such as workshops and on-site visits to help increase the understanding of regulatory obligations, improve environmental management practices and reduce pollution. Pollution Prevention, implementation of EMSs, and adoption of best management practices are key components of our compliance assistance activities. In addition to the routine compliance assistance currently provided during our investigations and compliance evaluations, during FY 2005 through 2008, the Region will focus its efforts on children's health, auto salvage yards, municipal Department of Public Works, and fleet maintenance facilities.

We will continue to make the Audit Policy and other compliance incentives available to the regulated community, including reduced penalties for violations, extended time for correction, and potentially fewer or less frequent inspections. EPA Region 2 also encourages owners of multiple facilities to disclose environmental violations because such disclosures encourage these regulated entities to review their operations more comprehensively, providing greater overall benefit to the

environment. During this period, we will be promoting the audit policy to local governments and departments of public works, and fleet maintenance facilities, in concert with targeted compliance assistance.

The attacks of September 11 in New York have made Homeland Security an issue of particular significance and resonance to Region 2. Over the next five years, EPA Region 2's homeland security efforts will be aligned with the national program, which focuses on four areas of responsibility: Critical infrastructure protection; Preparedness, response, and recovery; Communication and information management; and Protection of EPA personnel and infrastructure. Key aspects of each of these areas of responsibility are discussed in Chapter 2 of this Regional plan. Since the effort to enhance and support homeland security initiatives is significantly based on enhancing existing agency programs and response structures already in place, this program achieves and supports all five of the Agency's goals.

The chapters that follow discuss our environmental goals, and describe strategies, tools and programs that we will use to achieve them. We intend to continue to work closely with our partners, build on our existing collaborative efforts, and communicate our progress as clearly and effectively as possible to the people whom we serve.

Chapter 1: Regional Conditions and our Priorities in Managing the Environment

In this chapter, we identify the unique conditions that exist in Region 2 and highlight our highest priority initiatives under each of the five national goals of clean air, clean and safe water, preservation and restoration of land, healthy communities and ecosystems, and compliance and environmental stewardship.

The Region's 31.3 million residents are primarily concentrated in its urban areas. Close to 85% live in New York State (containing the largest and most densely populated city in the country) and New Jersey (the most densely populated state), mainly in the New York-New Jersey metropolitan area. Approximately one-third of the more than three and one-half million residents of Puerto Rico live in and around San Juan. Early industrialization and high density development have concentrated our air and water quality problems in the relatively small geographic areas that contain a large percentage of the population. While many of these urban centers are grappling with the challenge of abandoned, idled, or under-used industrial and commercial facilities, more recent development characterized by sprawl, presents environmental challenges in the remaining open space around these urban cores. Region 2 also contains areas such as the Pine Barrens, the Adirondacks Park (the largest publicly protected area in the mainland US), the Caribbean National Forest, Virgin Islands National Park, mangrove areas and coral reefs. These areas include unique and largely intact ecosystems that present different types of environmental management challenges.

Goal 1: Clean Air and Global Climate Change: EPA Region 2 has long recognized the threat that air pollution poses to human health and the environment, especially in the urban areas of New York, New Jersey and Puerto Rico. A 1990 Region 2 comparative risk study showed that all of the Region's human health risks marked as "very high" were related to air pollution. Air quality in Region 2, as in most industrialized areas, is impacted by emissions from automobiles, manufacturing, utility plants, refineries, and other mobile and stationary sources of pollution. While most of Region 2 meets air quality standards for most pollutants, the Region's more densely populated areas exceed the standards for carbon monoxide, ozone and particulate matter. Of these pollutants, by far the worst air quality problem in Region 2 is ground-level ozone. We have developed strategies, tools and programs to address the conditions of nonattainment for ozone, and other ambient air quality standards (see Chapter 2 subobjective 1.1.2).

Children's Health is a particular focus of our activities under Goal 1. Of the 31.3 million people in Region 2, 28% -8.8 million- are children. We note that New York City's South Bronx and East Harlem neighborhoods have the highest asthma rates in the nation. In both these areas, EPA is working with community groups and scientific experts to collect information on the problem and find the most effective intervention techniques. A variety of children's health-oriented strategies are described under objective 2 of the Clean Air and Global Climate change goal for the improvement of healthier indoor air quality. These measures are complemented by our enforcement and compliance activities through efforts such as our asbestos in schools program and our asbestos and residential lead regulations.

Goal 2: Clean & Safe Water: Water resources are central to the Region's character, its beauty, its economy and the health of its people. Region 2 possesses 60,000 miles of rivers and streams, highlighted by the Hudson River; the ports of San Juan and the New York/New Jersey Harbor; its bays and estuaries; Lake Ontario, Niagara Falls and the St. Lawrence Seaway; the Caribbean Sea; Long Island Sound and the ocean waters of the Jersey Shore, Long Island, Puerto Rico and the Virgin Islands. Sixty two percent of the Region receives drinking water from surface water sources such as lakes, reservoirs, rivers and rain catchments, with the remaining 38 percent served by ground water. Over 29 million people- receive water from over 3,800 community water systems. These systems are required to meet maximum contaminant levels (MCLs) for more than 80 contaminants, known or anticipated to cause adverse human health effects. Over time the number of people in Region 2 affected by MCL violations has decreased. Certain areas, especially in the Caribbean, continue to face drinking water quality and quantity problems. Puerto Rico considers providing high quality water to be one of the Commonwealth's highest environmental priorities. In the Virgin Islands, where there are no surface water resources and groundwater is almost non existent, residents and tourists must rely on a variety of non-conventional water sources and treatment techniques to meet their consumption needs.

To protect these resources Region 2 and the states have significantly reduced pollution

discharges into the Region's waters. These reductions have been mainly the result of controls on municipal and industrial wastewater discharges, which are now effectively regulated by a national permitting system. In New Jersey, for example, discharges from municipal and industrial point sources were reduced by 49 percent between 1985 and 1994. It is estimated that in 1972, approximately 2,000 miles of New York's rivers and streams were impaired by municipal wastewater pollution. Today, efforts to control wastewater discharges have reduced that figure to 700 miles. Region 2 states still identify thousands of impaired water body-pollutant combinations in their Clean Water Act 303(d) lists and 305(b) reports. New York, New Jersey, Puerto Rico, and Virgin Islands are working hard to complete a portion of the required total maximum daily loads (TMDLs) within the 8 to 13 year time frame recommended in EPA guidance. TMDL development is a critical component of our efforts to restore impaired waters to their designated uses. Region 2's use of TMDLs to improve water quality on a watershed basis is discussed under Chapter 2 subobjective 2.2.1 of Goal 2. New York State has also identified TMDLs and watershed protection as one of its top priorities; New York's priority of TMDLs is further discussed in chapter 5 of this Plan.

As point sources of water pollution have diminished, we have realized that many of the problems remaining result from non-point sources including: fertilizers and pesticides (from agriculture sites & also through residential applications); oil, grease, and salt from roadways; sediment from improperly-managed construction sites, crop land, forest lands, and eroding streambeds; bacteria and nutrients from livestock, pet wastes, and faulty septic systems; and sulfur dioxide and mercury from air deposition. With the recognition that non-point sources pose significant impacts to water quality, the region has solidified a number of strategies to address diffuse sources of water pollution. We have utilized a geographic approach to ensure the health of particular aquatic systems and have expanded the approach to other systems in the region. Beginning in 1985, EPA established a partnership with State and local agencies to protect the Long Island Sound that led to the Sound's being designated one of the first Estuaries of National Importance. Local efforts to protect the Niagara River have provided a model for the Great Lakes program, and led to the development of a Lake Ontario Lake-wide Management Plan.

Region 2 has expanded the approach noted above for the Long Island Sound and, working with its state and local partners under the National Estuary Program (NEP), has completed comprehensive conservation management plans for three Region 2 estuaries: the Long Island Sound, the New York/New Jersey Harbor, and the Delaware River. The Region is also developing plans for the Peconic Bay, Barnegat Bay and San Juan Bay. All six estuaries are currently threatened by pollution, development and overuse. Activities under the NEP include decreasing toxic pollution through pollution prevention programs, constructing artificial wetlands, managing storm water and non-point runoff, improving land use planning and management, and monitoring and controlling vessel discharges. The region's particular NEP strategies, tools and programs are further described in Chapter 2 subobjective 4.3.1 of our Healthy Communities & Ecosystems goal.

While toxics entering the Region's waters have decreased in recent years, many remain in the

sediment layers lining the bottom of streams, rivers, lakes and estuaries. A 1997 EPA study, which included sediment sampling at 1,096 stations throughout Region 2, found substantial sediment contamination in many parts of New York and New Jersey. Sampling sites were classified into three tiers according to their potential for adverse effects on aquatic life and human health (Tier 1 sites represent those with the highest levels of contaminants). Throughout the Region, 32 percent of the sites rank as Tier 1 and are considered to cause probable adverse effects. On a Regional basis, the most common chemical contaminants are copper, lead, nickel, PCBs, mercury, cadmium, zinc, DDT, and arsenic. Based on this study, EPA has identified 12 watersheds, encompassing portions of New York and New Jersey, as areas of probable concern. The presence of contaminated sediments and other chemical pollution can lead to high concentrations of contaminants in fish tissue. Due to the dangers associated with consumption of contaminated fish, Region 2 has, since 1994, granted over $200,000 to New York and New Jersey to conduct public outreach and education programs on fish advisories that urge populations at risk (sustenance anglers, women and children) to limit or avoid eating fish from certain waters. These efforts have primarily focused on the Hudson River, Lake Erie, and the New York/New Jersey Harbor- areas affected by PCB contamination. More recently, on February 2002, Region 2 signed a Record of Decision (ROD) calling for targeted environmental dredging and removal of approximately 2.65 million cubic yards of PCB-contaminated sediment from a 40-mile stretch of the Upper Hudson River. This effort should provide a useful model for a high volume clean up of contaminated sediments.

Dredging of sediments alone will not achieve the national goal of clean and safe water nor agency efforts to preserve land under Goal 3. Accordingly, we have begun to include sediment decontamination in our effort to better achieving this goal. This strategy is consistent with a congressional mandate that specifically targets development of sediment decontamination technologies for dredged material. Sediment decontamination can have additional applications beyond the dredging program in cross-program applications in Superfund, aquatic brownfields (e.g., Gowanus Canal, Newtown Creek), and NEP implementation goals. Three technologies that have undergone pilot-scale implementation through the NY/NJ harbor Sediment Decontamination Program that are moving towards full-scale demonstrations with commercial-scale equipment. The success of these demonstrations from an environmental and economic perspective would rapidly move into the next phase of commercial-scale implementation in the Port of NY/NJ. These technologies are also being integrated into the Superfund Program as it relates to the Passaic River and the Gowanus Canal (aquatic brownfields). Given the promise of these technologies, the Region will weigh the possibility of integrating dredged material and contaminated sediments into a unified program with cross-program applications.

Goal 3: Preserve and Restore Land: Hazardous and nonhazardous wastes on land can migrate to the other media potentially affecting public health and threatening healthy ecosystems. We have identified a number of regional strategies, tools and programs to achieve goal three as discussed in Chapter 2 of this Plan. One of the most significant activities in this area is our compliance and enforcement of the Underground Storage Tank (UST) program. UST enforcement activities include

inspections and determination of significant operational compliance (SOC). All four of the Region 2 states/territories have UST programs. Region 2 is the primary UST enforcer for upgrade requirements in New York, New Jersey, and the Virgin Islands; only Puerto Rico has received State Program Approval as the primary implementer and enforcer for this program.

The number of confirmed releases reported in Region 2 has been growing at a rate of approximately six percent per year since 1989. Accordingly, we are interested in closing the gap between the number of confirmed releases from USTs and the number of cleanups completed. While some progress has been made in the quality of tank installation and construction, leak detection monitoring systems, and the pace at which cleanups are completed, there is still work to be done to complete on-going cleanups more quickly and initiate cleanups at sites where releases have been detected. The region's approach to addressing UST contamination is discussed in Chapter 2 subobjective 3.1.2 under Goal 3.

Homeland security activities are also of significance in our environmental protection efforts under Goal 3. This topic is discussed in depth in chapters 2 and 3 of this Plan.

Goal 4: Healthy Communities and Ecosystems: Our discussions thus far have focused on our efforts to control sources of contamination that are with us today and that we can control and reduce. We must also deal with the legacy of past contamination and attempt to create a future that minimizes the impact of the continuing growth of our population, infrastructure and economy. The concept of smart growth has helped change the terms of the development debate away from the traditional growth/no growth question to "how and where should new development be accommodated". Our activities under the TMDL and NEP programs described above have been informed by a clearer understanding of the principles of smart growth. Brownfields redevelopment is another strategy that EPA is pursuing that has been influenced by smart growth principles; enhancing our efforts to control risks to human health, as well as restoring the economic and environmental health of communities. Consistent with this goal, the Region is committed to providing equal protection to all communities within our jurisdiction. Towards this end, the Region's Environmental Justice (EJ) program works to better safeguard minority and low income communities from disproportionately high and adverse environmental impacts. Our various strategies, tools and programs to ensure EJ are discussed in subobjective 4.2.2.

One emerging area that we are pursuing under this goal is green buildings/green energy/ clean fuels. Recognizing that smarter techniques of construction and building operation can save significant cost and energy, EPA Region 2 has been actively promoting the use of Green Buildings principles and clean fuels. Residences and offices nationwide utilize 36 billion gallons of water a day, while construction-related activities generate 136 million tons of debris a year. The Region is leading by example to reduce potential environmental impacts associated with construction and operation of our facilities. Specifically, we have procured wind power from the energy grid in an equivalent amount to our electricity usage in our Manhattan offices; the Region is using a green power blend at our Edison

New Jersey Facility; and we are taking part in a Greening the Government initiative that includes a variety of strategies from holding green meetings to procuring environmentally friendly products for our use.

The Region has worked in partnership with a variety of stakeholders providing technical and financial assistance to promote greener construction practices. Over the next five years, EPA Region 2 is looking to expand its partnerships and its expertise in this important area. We will continue working with the National Program Managers (NPMs) and key external stakeholders to promote green building principles. Regional staff will evaluate the use of alternative fuels in the Regional fleet and expansion of the Region's use of alternative energy, and other efforts that promote pollution prevention. In a closely related matter, Region 2's environmental management system (EMS) efforts will assess opportunities to strengthen pollution prevention and environmental stewardship among Regional employees. Chapter 3 includes further information on the Region's EMS activities.

Goal 5: Compliance and Environmental Stewardship: The Region oversees a number of programs to ensure compliance with federal laws and regulations to minimize or eliminate pollution before it is generated and to promote environmental stewardship behavior to achieve this goal. We are committed to exploring innovations in environmental management, so as to promote efficiency, effectiveness and a more pro-active approach to addressing future demands for improved protection of public health and the environment. Our efforts under Goal 5 also focus on building the capacity of our Indian Nations to manage environmental interests that affect their lands. This effort is described more fully in Objective 5.3.

In summary, Region 2 works hard to provide clean air, pure water and better-protected land. Our efforts also help to ensure healthy communities & ecosystems, compliance with environmental regulations & environmental stewardship. These five goal areas are more thoroughly discussed in Chapter 2 of this Plan, where we provide our strategies, tools & programs for meeting the Nation's environmental agenda. As we look to the future, we expect to build more cross-program bridges to address environmental challenges, and continue our active coordination with our states, Indian Nations and our communities in seeking solutions to environmental problems.

Chapter 2: Regional Strategies for Achieving National Goals and Objectives

Goal 1: Clean Air and Global Climate Change
Objective 1.1 Healthier Outdoor Air
Subobjective 1.1.1 More people breathing Cleaner Air (Ozone, sulfur dioxide, Clear Skies, NOx)

Current State/Major Problems to be Addressed:
In Region 2, 21% of the population live in areas that attain air quality standards (6,724,000 people out of a total of 31,291,000). Attainment areas include portions of upstate NY, all of PR (except Guaynabo PM10 non-attainment area), and all of VI. All of NJ is in non-attainment for ozone. Trends in the Air Quality Index (AQI) were generally flat from 1992 to 2001, with major cities reporting less than 35 unhealthy days (AQIs > 100) per year: Buffalo varied from 1 to 14 days, NYC 4-25, Southern NJ 11-31. Almost all unhealthy days were due to 8-hour average ozone, and some to PM2.5.

All of NJ, the NYC metro area, and large portions of upstate NY have measured violations of the 8-hour ozone standard, using data from 2001-2003. Violations in upstate NY are contributed largely by sources in the Midwestern states and possibly Canada. Areas likely to be in violation of the PM2.5 standards are the NYC metro area, northeastern NJ, and cities in upstate NY. There are no CO non-attainment areas. In 2003 and 2004 specific areas of Region 2 will be officially designated nonattainment for 8-hour ozone and PM-2.5.

Results from the NATA 1996 National-Scale Assessment indicated that exposures in Region 2 to 33 urban hazardous air pollutants plus diesel PM engendered health risks that are among the highest in the country, and that mobile sources contribute more to these risks than the stationary sources.

Strategy Highlights:

Follows national program, with some unique priorities, as follow. Heavy duty diesel engines are a major source of fine particles. This is particularly significant for Region 2's environmental justice communities because of their proximity to waste transfer stations, bus depots, and engines used in on-road/non-road applications, and their very high asthma rates. Therefore, the Region has put a priority on gathering air quality data from these neighborhoods, and initiated a Clean School Buses Initiative to protect the most vulnerable portion of the population, children. Further, the rebuilding of lower Manhattan has provided opportunities to use low emission technologies on diesels, and the Region is very involved in promoting retrofit programs for construction equipment and passenger ferries. Homeland security strategies are included in Goal 4, Objective 5. In addition, the Region is working closely with the regional planning associations and environmental groups to promote mobile source VOC and Nox reduction strategies before they are required as part of the 8-hour ozone strategies.

The regional strategy requires no disinvestment in national activities and the Region is on target to meet the Agency's 2008 goals.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs**
*Assist states in reducing stationary and area source emissions	State emission reduction plans & programs [DEPP] NOx emission budgets and trading programs [DEPP] Emission inventories [DEPP] OTC control measure development and approval [DEPP] Clear Skies Initiative [DEPP]
Implement air quality designations for 8-hr ozone & PM2.5 standard.	Monitoring network funding and oversight [DEPP & DESA] Evaluate air quality data and trends [DEPP] SIP development & rule making [DEPP]

Strategies	Tools/Programs
Increase ability of public to participate in air quality decisions.	Ozone mapping program [DEPP] Air Quality Index (AQI) [DEPP] Ozone action days [DEPP]
Gather information to enable Indian Nations to assess trends and make informed air quality decisions.	PM2.5 monitor operation training [DEPP] Training and funding for VOC & air toxics monitoring [DEPP] Facilitate Nations' participation in Regional Haze planning [DEPP]
Assist Indian Nations to reduce stationary/area source emissions through Tribal Air Program (TAP) development	Assist air monitoring efforts within Indian Nations for criteria pollutants and Assist in Tribal Implementation Plan (TIP) development for criteria pollutants [DEPP] Assist in development of tribal emission inventories [DEPP]

Goal 1: Clean Air and Global Climate Change
Objective 1.1 Healthier Outdoor Air
Subobjective 1.1.2 Reduced Risk from Toxic Air Pollutants (MACT, Mobile Sources, diesel buses)

Current State/Major Problems to be Addressed:
See subobjective 1.1.1 discussion above for current state of environmental and human health conditions related to this subobjective.

Strategy Highlights:
Follows national program, with some unique priorities, as follow. Heavy duty diesel engines are a major source of toxic compounds as identified in the National Air Toxics Assessment. This is particularly significant for Region 2's urban and environmental justice communities because of their proximity to waste transfer stations, bus depots, and engines used in on-road/non-road applications, and their very high asthma rates. Therefore, the Region has put a priority on gathering air toxics data from these urban areas, and initiated a Clean School Buses Initiative to protect the most vulnerable portion of the population, children. Further, the rebuilding of lower Manhattan has provided opportunities to use low emission technologies on diesels, and the Region is very involved in promoting retrofit programs for construction equipment and passenger ferries. Homeland security strategies are included in Goal 4, Objective 5.

Region 2 will use a multi-criteria selection process, which includes the MACT Prioritization Tool, TRI Reports, the Risk Screening Environmental Indicator Tool, and state and local input, to prioritize sectors and facilities for MACT compliance inspections. Our initial efforts will be directed at bulk terminals (gasoline distribution facilities) and petroleum refineries. This compliance effort is identified in our strategies, tools and programs under Subobjective 5.1.3 related to monitoring & enforcement.

Region 2 will continue to review the progress of the states in taking delegation of the MACT program and provide technical and programmatic assistance as needed.

The regional strategy requires no disinvestment in national activities and the Region is on target to meet the Agency's 2008 goals.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	Tools/Programs
*Implement new fuels & mobile source programs	Phase 2 reformulated gasoline [DEPP] Tier 2 vehicle standards & low sulfur gasoline [DEPP] NY Phase 2 low emission vehicle program [DEPP] Upgrade Inspection & Maintenance programs with On Board Diagnostics [DEPP] Greening Lower Manhattan: Retrofit diesel construction equipment & passenger ferries in NY/NJ Harbor and promote clean fuels [DEPP] Clean School Buses Initiative: Retrofit school buses and promote ultra-low sulfur fuels [DEPP & OPM]
Implement air toxics emission standards.	Complete MACT standards [DEPP] Develop residual risk standards [DEPP] NJ General Permit for Dry Cleaners [DEPP] Implement MACT and perform risk assessments for hazardous waste combustion facilities [DEPP]

Goal 1: Clean Air and Global Climate Change
Objective 1.2: Healthier Indoor Air (Radon, mold, asthma triggers/homes/schools/workplaces)

National Objective 1.2: Healthier Indoor Air.

Current State/Major Problems to be Addressed:

The asthma problem in Region 2 urban areas is particularly severe. In 1995, the asthma hospitalization rate of NYC children was 2.8 times higher than the US rate. Other data show levels significantly higher than the national average in PR, and in Camden and Newark, NJ. A recent Region 2 asthma study shows that indoor environmental interventions are linked with reduced emergency room visits in NY & PR, and reduced school absences in PR. Substantial areas of NJ and NY are at risk for elevated levels of radon. Both states have developed radon risk maps at the municipality level.

Strategy Highlights:

Regional Approach: Region 2 works effectively with State, local, and other federal agencies to reduce the risk from indoor air contaminants. In addition to direct grants, the Region participates actively in a number of asthma coalitions **(See Chapter 3 Partnerships section)**. All asthma activities involving children include attempting to link IAQTFS implementations and "smoke-free home" pledges. Materials for Puerto Rico must be in Spanish, and must be culturally and climatically appropriate. Office building occupants are not a focus of regional programs. We continue to work with New York and New Jersey through the State Indoor Radon Grant program to implement some of the most effective radon programs in the nation.

The Ritual Use of Mercury Program is a public education campaign being created for Haitian- and Caribbean-American communities, particularly those that use mercury during the practice of spiritist faiths such as Santeria. It is being developed as a collaborative effort between EPA, state departments of health, and Hispanic services organizations.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs** [all DEPP]
*Reduce exposures to indoor environmental triggers of asthma	In-home asthma grants. Participate in asthma coalitions. Link Managing Asthma in the School environment to Indoor Air Quality Tools for Schools (IAQTFS) implementations. Promote "smoke-free home" pledge campaign in all asthma initiatives Health at Home: Controlling Asthma Triggers video. Regional Asthma Summits and Grantee Forums.
Target unique indoor environmental conditions in Puerto Rico	Open Airways and Health at Home in Spanish Island Specific coalitions and Targeted grants Develop asthma trigger control information specific to P.R. Schools USDA Healthy Indoor Air for America's Homes
Improve indoor environments in schools	Indoor Air Quality Tools for Schools (IAQTFS) kits and grants State IAQ policies Use Healthy School Environment Assessment Tool
Build state capacity to implement a radon program	State Indoor Radon Grants (SIRG) program NY & NJ state assessments Multimedia Mitigation Programs (if radon rule is promulgated)

Strategies	**Tools/Programs** [all DEPP]
Public Education	Educate communities regarding dangers of ritual use of mercury

Goal 1: Clean Air and Global Climate Change
Objective 1.3: Protect the Ozone Layer (CFCs, methyl bromide)

Current State/Major Problems to be Addressed:

To address the problem of ozone depletion and its negative impact on human health and the environment, the United Nations Environment Program sponsored the successful negotiation of the Montreal Protocol on substances that deplete the Ozone Layer. In effect since 1988, the Protocol requires parties (currently 168 nations) to control their production and consumption of substances that deplete stratospheric ozone. EPA promulgated and is implementing flexible regulations that eliminate class I ozone-depleting substances (ODSs), require recovery and recycling/reclamation of refrigerants, require labeling of products manufactured using class I substances, identify and promote the use of acceptable substitutes, ban nonessential products using ozone-depleting substances where substitutes exist, and require Federal entities to maximize the use of safe alternatives. ODSs used in Region 2 include chlorofluorocarbons (CFCs), a Class I ODS, and hydrochlorofluorocarbons (HCFCs), a Class II ODS.

CFCs have been used in the Region generally by three different types of entities, those that require refrigerants for comfort cooling, commercial purposes, and industrial purposes. Historically, Region 2 has worked primarily with entities that use or handle refrigerants for comfort cooling, large public transportation systems, grocery stores, and automobile salvage yards. Recently, Region 2 worked with the New York Metropolitan Transit Authority (MTA). The focus of the investigation was on the improper repair of leaking air conditioning systems that required more than 50 pounds of CFCs. Region 2 has also discovered instances of the sale of ODSs to non-certified technicians at commercial venues. The Region has collaborated on a National scale to eliminate this practice.

Region 2 has not received any Notices of Arrival for methyl bromide at any Region 2 port in the recent past. This, however, doesn't

mean it is not being imported into other areas of the United States.

Strategy Highlights:
To adequately implement and enforce stratospheric protection regulations, EPA Region 2 will continue to conduct compliance monitoring, compliance assistance activities, take appropriate enforcement actions, and work with all relevant parties (i.e., the Department of Justice Federal Bureau of Investigation and the Department of Justice) to conduct necessary follow-up activities. Region 2 full-compliance evaluations, which cover all air programs, include the Stratospheric Ozone Protection program and facilities are evaluated for compliance with all applicable CFC regulations, including those for labeling and non-essential use violations. Both full and partial compliance evaluations will target facilities with appliances with potential CFC emissions such as industrial process refrigeration units. Title V requires States to include Title VI (Stratospheric Ozone) compliance assurance in their facilities' air permits. Region 2 has also developed self-audit checklists that CFC handlers can use to evaluate their compliance with the regulations. The Region will provide these checklists to CFC handlers and encourage voluntary self-disclosures as a component of geographic and other targeted initiatives. Region 2 will collaborate with our States on any potential permit violations. In addition, Region 2 will support State efforts to evaluate the compliance status of the Stratospheric Ozone affected facilities. Any applicable Significant New Alternatives Policy (SNAP) restrictions will be enforced at the regional level. It is necessary to continue the valuable work the Region is currently undertaking to follow up on State and consumer complaints, as well as to conduct targeted inspections, in an effort to ensure stratospheric protection. The potential exists for State and consumer complaints to result in partial compliance evaluations.

Currently, methyl bromide emissions are not a significant concern. However, the Region will continue to monitor fugitive and stack air releases via the Toxic Release Inventory (TRI). The Region will support Headquarters in their efforts to eliminate the production and import, except for exemptions permitted by the Montreal Protocol, of all methyl bromide. We will also work to educate those facilities that have reported releases of methyl bromide to the TRI, of the phase out effort.

The regional strategy requires no disinvestment in national activities and we are on target for meeting Agency goals for CFCs and other ODSs.

Strategies	**Tools/Programs** [All DECA]

Conduct full-compliance evaluation inspections at facilities with industrial process refrigeration units (i.e., petroleum refineries, bulk terminals, federal facilities)	NJ MACT "Enforcement Sweep" Compliance Monitoring and Enforcement [DECA] CAA Title V permits CAA Title VI requirements
Conduct CFC specific unit partial compliance evaluations at auto salvage yards, food industry facilities, and other facilities with industrial process refrigeration units.	Compliance monitoring and enforcement [DECA] CAA Title V permits CAA Title VI requirements
Monitor releases of methyl bromide (bromomethane).	Toxic Release Inventory
Provide Compliance Assistance and Encourage self-disclosures from CFC handlers	Compliance Assistance tools (checklists, small business site visits) and Compliance Incentives

Goal 1: Clean Air and Global Climate Change
Objective 4: Radiation
Subobjective 1.4.1 Enhance Radiation Protection

Current State/Major Problems to be Addressed:
Within Region 2 there are numerous Superfund sites containing mixed waste and other radioactive contamination, Formerly Utilized Sites Remedial Action Plan (FUSRAP) sites, several nuclear power plants, and many rad-NESHAPS regulated facilities. Therefore, due to the population density of the region's urban environments, protection of public health and the environment from unwanted or accidental radiation releases is a critical issue with little margin for error.

Strategy Highlights:
Region 2 works aggressively with State, local, and other federal agencies in a comprehensive effort to ensure protection of the public and the environment from radiation exposure. Critical initiatives include close support of the effort to remediate the West Valley Demonstration Project site; the deployment of Radiation staff to the Regional Response Center located in Edison, NJ; and continuous support of the Montgomery national lab in the deployment of a new prototype gamma-spectroscopy ERAMS monitor.

The region's strategy requires no disinvestment in National activities and we are on target to meet Agency goals by 2008.

Strategies	Tools/Programs
Implement standards and guidance to limit public & environmental exposure to radiation and ensure safe waste disposal.	Evaluate DOE compliance with EPA radiation air toxic standards (NESHAPs) [DEPP]
Inform and educate people about radiation risks and promote actions that reduce human exposure	Support remediation and decommissioning efforts at NCP, DOE, and other rad sites [DEPP]
Obtain and analyze quality data to support decision-making	Maintain NYC National Radiation Monitoring System (NMRS) / Environmental Radiation Monitoring System (ERAMS) station [DEPP]

Goal 1: Clean Air and Global Climate Change
Objective 4: Radiation
Subobjective 1.4.2 Maintain Emergency Response Readiness

Current State/Major Problems to be Addressed:
Region 2 includes many large urban areas, nuclear power plants, and some of the most complex public infrastructure systems (e.g., public transportation, shipping, etc.) in the nation. It is sensitive to all types of potential nuclear emergencies as a result of natural disasters, industrial accidents, and terrorism.

Strategy Highlights:
Region 2 works closely with State and other federal agencies, especially the Federal Emergency Management Agency, on maintaining ready response capabilities. Critical initiatives include the establishment of a work station staffed by NYC Region 2 radiation staff and physically located at the Regional Response Branch in Edison, NJ and continuous support of the Montgomery national lab in the deployment of a new prototype gamma-spectroscopy ERAMS monitor.

The Region's strategy requires no disinvestment in national activities and we are on target to meet Agency goals by 2008.

Strategies	**Tools/Programs**
Support national radiological emergency response efforts	Participate in FEMA emergency response exercises [DEPP] Implement Regional "Roadmap": control/inventory of Regional radioactive sources; train emergency response personnel in radiological response operations; complete and refine Regional rad response plan; participate in rad response exercises at local and state levels throughout Region 2. [DEPP & ERRD]

Goal 1: Clean Air and Global Climate Change
Objective 1.5: Reduce Green House Gases (Energy Star, Smart Way, Commuter Choice)

Current State/Major Problems to be Addressed:
Worldwide releases of green house gases are predicted to lead to a rise in average temperature potentially having significant effects on public health, economy and infrastructure in Region 2. A National climate change assessment shows that our primary concerns are:
Coastal flooding: NJ's coastline will recede. Tropical storm events will increase in severity and frequency in portions of NY, PR and VI. All will lose storm buffering capability, with severe coastal flooding and wetlands loss. Coral reefs and mangrove swamps will deteriorate.
Urban Heat Island Effects: Greater San Juan PR, NY City Metro Area and Philadelphia Metro Area are predicted generators of an Urban Heat Island. Ground level air heated by dark-colored buildings and road surfaces creates an increasing demand for electric power to sustain air conditioning capability. This exacerbates heat stress and worsens air quality.
Vector borne disease: Increased rainfall will cause standing pools of water, providing breeding grounds for carriers of vector borne diseases.
Water supply and quality: Sea level rise, storm surges, salt water plume extensions up the Hudson and Delaware Rivers will potentially threaten the supply and quality of water available to NY and NJ. Increased tropical storm activity will mean that PR and VI will encounter potentially continuous storm water overflow problems affecting water quality.

Strategy Highlights:
The effects of climate change are beyond EPA's ability to resolve alone. Region 2 is focusing on building partnerships with other Federal agencies, state/local governments, Indian Nations, universities, industries, and non-profit organizations. In addition, the Region is working closely with the regional planning associations and environmental groups to promote mobile source VOC and NOx reduction strategies before they are required as part of the 8-hour ozone SIP strategies. Some examples of voluntary initiatives include Smartway, and Best Workplaces (formerly called Commuter Choice).

The Region's strategy requires no disinvestment in national activities and we are on target to meet Agency goals by 2008.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs**
*Provide guidance and build state capacity to reduce greenhouse gas emissions	NY State Greenhouse Gas Action Plan & Climate Change Action Plan; NJ Climate Change Action Plan [DEPP] PR MARKAL Integrated-MACRO Energy/Materials Flow Model [DEPP] Greater Caribbean P2 Web Page [DEPP] and P2 Technology Evaluation [DEPP]
*Mitigate impacts of climate change	NJ Urban Heat Island projects [DEPP] NYC Cool Communities Program [DEPP] Greater San Juan (PR) metro area integrated climate study [DEPP]
*Increase public awareness of climate change impacts; enable people to reduce their contribution to GHG emissions	National Global Climate Change Assessment Program [DEPP] Energy Star Program [DEPP] Integrated Energy efficiency and P2 technologies/best practices [DEPP] R2 Green Power web site & Green power options for Edison facility[DEPP/OPM] ORD-NESCAUM MARKAL Northeastern Region System Model [DEPP]

Goal 1: Clean Air and Global Climate Change
Objective: 1.6. Science/Research
Subobjective: 1.6.1 Support Air Programs

Current State / Major Problems to be Addressed:
See above objectives for discussion of environmental and human health conditions.

Strategy Highlights:
The primary ambient air issue facing the Region in future years will be the continuing non-attainment of the ozone and $PM_{2.5}$ standards. In order to achieve Region-wide attainment of these standards, it will be necessary first to determine through monitoring and modeling the extent and degree of non-attainment, along with an understanding of the origins of the contributing precursors. The Region and the states will need to continue to refine and update their ongoing monitoring, modeling and analytical assessments of the ozone and $PM_{2.5}$ precursor concentrations on a multi-state, Region-wide basis. This will include prioritizing the funding of the most critical and currently underfunded elements, and utilizing the most cost-effective approaches for information gathering and assessment. It will also include enhanced regional oversight of the states' data collection and Quality Systems, combined with independent EPA auditing and assessment of the state operations. Partnering with the Region's Indian Nations on an integrated approach for investigating the ecological effects of climate change will also be important.

An additional important air issue will be the need for more and improved real-time monitoring for PM and toxics. These will be needed to allow governments, industry and the public to make decisions based on actual measurements, rather than model predictions. They will also be needed to enhance the agencies' effectiveness in dealing with various homeland security issues.

It is not likely that the Region will need to divest entirely from any national activities, but through necessary short and middle-term prioritization, may delay implementation or completion of some. Currently, the Region is on target to meet its contribution toward the Agency's 2008 goal.

Strategies	**Tools/Programs**
Increase knowledge about ozone formation and controls needed to achieve ozone & PM2.5 standards.	Oversee Photochemical Assessment Monitoring Stations (PAMS) Networks [DEPP], including QA oversight and auditing [DESA] Implement Photochemical grid model [DEPP] Evaluate geographic patterns of ozone, ozone precursors, and PM2.5 to determine effectiveness of regional reductions programs [DEPP] Perform Multi-state modeling to reduce impact of transported ozone & PM2.5 [DEPP] Utilize AIRS to maintain and assess air monitoring data [DEPP]

Strategies	Tools/Programs
Improve data collection networks.	Work with states to redesign monitoring networks consistent with NCORE and National Monitoring Strategy goals, including greater implementation of real-time instrumentation [DEPP] Complete installation of PM2.5 monitors [DEPP] Oversee $PM_{2.5}$ monitoring network operation & PEP audit program [DESA] Great Lakes and Hudson River air deposition analyses [DEPP] Assist states in criteria pollutant and air toxics monitoring [DESA] and assessment [DEPP]
Improve data availability to assess air quality in PR, VI	Expand NATA coverage to PR/VI [DEPP] Ensure funding and assistance to PR/VI for repair & replacement of monitoring instruments [DESA & DEPP]
Improve environmental measurements for air monitoring and ensure that data are of known, documented, acceptable quality	Perform audits and review of state QA manuals and plans to ensure validity and accuracy of measurements [DESA] NELAP accreditation [DESA] Ensure state documentation of Quality Systems [DESA] Perform Technical and Quality System Assessments [DESA]
Improve validity and accuracy of data submitted to EPA/States by facilities and their laboratories	Oversee air monitoring data generation by States and facilities through traditional (instrument) and enhanced (TTP) auditing [DESA] Evaluate methods of collecting, preserving and analyzing air monitoring data [DESA]
Improve data analysis capabilities	Develop relevant environmental indicators using GIS [OPM]

Strategies	Tools/Programs
Conduct research that contributes to overall health of Indian Nation communities and ecosystems	Work in partnership with Indian Nations to collect and track data about effects from climate change [DEPP] Convene stakeholder meeting on integrating climate change assessments from Indian Nations for the Nations. Produce a template which resembles in form but not substance the metro east coast integrated climate study. Following this template will allow the climate assessments performed under USGCRP.

Goal 2: Clean and Safe Water
Objective 2.1 Protect Human Health
Sub-objective 2.1.1 Water Safe to Drink

Current State/Major Problems to be Addressed:
In FY 2003, 56% of the population in Region 2 was served by community water systems meeting health-based standards for the entire year. There were two large systems that had short term violations. NYC (Cat/Del) turbidity violation (6.5M people) and Suffolk Co. nitrate violation (1.0M people). Two other large systems have a history of persistent violations. NYC Croton (1.0M people) for failing to install filtration by 1993 and PR's Metropolitan System (1.4M people) which is served by five filtration plants that have recurring turbidity violations. Croton and PRASA's Metropolitan System represent almost 8% of the Region 2 population. Depending upon site selection, Croton will not be filtered until 2010 at the earliest and 2012 at the latest, and we are working on a supplement to the existing federal consent decree. As far as the Metro system with five different sources/treatment plants, most of which are operating over design capacity, it is very difficult to assure that all plants remain free of violations during a given year due to the unique challenges presented by hurricanes, power outages, and large fluctuations in raw water turbidity. Therefore, attaining consistent compliance at the Metro system will take some time. To address this, the PRDOH is currently revising a Commonwealth court order to require detailed evaluations of all the Metro system plants, which will lead to long term improvements. Additionally, there is a possibility that EPA, DOH, and PRASA will agree to enter into a long term court order to address all capital needs of these and other PRASA plants and violations.

EPA retained primacy of the SWTR for NYC's unfiltered Catskill/Delaware Public Water Supply System, which serves 6.5 million people in Region 2. In 2002, EPA provided the City continued relief from the SWTR requirement to filter the water supply. Our priority is to ensure the public's continued access to safe drinking water by vigilantly overseeing the City's implementation of the water supply protection requirements in EPA's Filtration Avoidance Determination (FAD), and to help prevent violations similar to the one experienced in 2003 **(See related information in Chapter 3 Partnerships section)** . Non-PRASA community water systems are the smallest systems in PR. These 236 supplies may pose a risk to public health, with many not complying with all local and federal regulations. There is a joint state/EPA strategy in place for a shared effort (Non-PRASA Strategy). All systems are under state or federal Administrative Orders (about 100 active federal AOs) and are in various stages of non-compliance. Additional effort needs to be undertaken to reduce the number of non-PRASA systems through consolidation. The desalinization of sea water and the collection of rainwater stored in cisterns, are sources of drinking water in USVI requiring special attention to ensure that access to safe drinking

water is maintained.

Privately owned household wells are not considered public water supply systems and are not subject to regulation by EPA. Nevertheless, to the extent that EPA addresses the protection of public water supplies under its source water assessment and protection efforts, nearby private wells will benefit. Furthermore, with respect to unregulated sources, EPA informally supports state initiatives such as New Jersey's Private Well Testing Act, which requires testing of private wells upon property transfer. In general, however, when a homeowner has a problem with a water supply well, the county health department should be the first point of contact, followed by the state agency.

Strategy Highlights:
Region 2 will work closely with states, tribes, and owners and operators of municipal water systems to ensure the full and effective implementation of drinking-water standards and to support the highest possible rate of compliance with those standards. Region 2 will provide guidance, training, and technical assistance to states, tribes, and systems; ensure proper certification of water system operators; and promote consumer awareness of the safety of drinking-water supplies. The Region will also vigorously enforce the SDWA to address systems in significant non-compliance which have not been addressed by the states. Additionally, the region will continue to closely monitor early compliance with the numerous new drinking water regulations and take immediate enforcement to address violations of these new requirements during the period when EPA has primary enforcement responsibility, while the states are seeking primacy revisions.

Concerning SDWIS data quality, Region 2 will also continue to work with states and others to improve data completeness, accuracy, timeliness, and consistency. Data verification audits will also continue, so will targeted compliance reviews to assure early implementation of new rules. Additionally, the Region will use the quarterly SNC process to assure that violations are reported accurately, that they are addressed, and that the related enforcement action is reported to SDWIS.

Region 2 will support protection of drinking-water sources through training and technical assistance to states, tribes, and communities that are taking voluntary measures to prevent or reduce contamination of source water. The Region will foster coordination of contamination prevention strategies across jurisdictions, and will also work with states and tribes to use Clean Water Act authorities to prevent contamination of waters that serve as public water supplies and are at high risk.

The Region will have extreme difficulty achieving the national target for meeting health based standards, but will use the tools available to assure that violations are addressed through appropriate enforcement action requiring correction. As indicated in the problem section above , the Croton and PRASA's Metropolitan System representing almost 8% of our Region's population are under long term enforcement orders. The Region with the States will continue to monitor compliance with these orders as well as actions taken against other facilities to ensure the health based standards are achieved.

(Enforcement and Compliance strategies, tools and programs related to achieving water safe to drink are identified in the table corresponding to subobjective 5.1.3 [Monitoring and Enforcement])

Strategies	Tools/Programs
Provide oversight and build state capacity to deliver safe drinking water.	Submission/approval of primacy packages. Drinking Water Academy. Funding for VI cistern/rainwater harvesting studies.
Build capacity of Indian Nations to deliver safe drinking water.	Technical assistance via Circuit Riders.
Enable community water systems to meet health-based standards.	Drinking Water State Revolving Fund. Croton Consent Decree. Non-PRASA Strategy. Monitor raw water and distribution system for NYC drinking water supply.
Restore & protect source water areas and drinking water supplies.	State source water assessments. NYC Catskill/Delaware Public Water System FAD. Wellhead Protection program. DWSRF & source water protection grant programs. Assist communities to protect source waters.

Strategies	Tools/Programs
Reduce risk of drinking water contamination from shallow injection wells.	Class V injection well regulations. Outreach, technical assistance, compliance monitoring, and enforcement.

Goal 2: Clean & SafeWater
Objective 2.1: Protect Human Health
Subobjective: 2.1.2 Shell/Fish Safe to Eat

Current State /Major Problems to be Addressed:
Fish/Shellfish: Regional conditions are difficult to determine due to dramatic differences in the availability of data and the classification of waters among the states. PR and VI have significant data gaps.
In NJ, conditions of shellfishing waters are improving: waters that fully support shellfishing have risen from 75% in 1997, to 87% in 1998, and 88% in 2000. Waters that support recreational use are: 22% of river miles, 73% of lakes/reservoirs, and 55% of tidal waters. Fish advisory information on mercury (2002) and PCBs and Dioxin (2003) is contained on the NJDEP website at http://www.state.njus/dep/dsr/njmainfish.htm. These include information regarding consumption of both fish and shellfish. The 2002 Integrated Report states" The Department has issued statewide advisories for American eel, bluefish, striped bass, and American lobster for PCB contamination." There are statewide advisories for mercury in freshwater for largemouth bass and chain pickerel, with several waterbodies excepted.

For NY, trends are difficult to discern. NY reports yearly increases in the number of fish consumption advisories since 1995, which indicates a decline in waters supporting fishing. A large portion of this is due to mercury deposition, and includes the acreage of several large lakes. In the 2002 305(b) report, impacts to more than 37% of the estuary waters are a result of fish consumption advisories. 11% do not fully support shellfishing use. Therefore, trend analysis based on acreage support alone might misconstrue the true impacts of pollution on shellfishing. Waters that support fish and shellfish consumption are: 15.5% of river miles, 0.03% of lake acres, *59%* of estuary square miles. Of the nearly 1.2M acres of NYS marine waters assessed, the 16% closed for shellfishing contain some of the State's most productive nearshore beds.

The Environmental Protection Agency's third "Great Waters Report," confirms that the Great Lakes and coastal waters are being contaminated from air pollution -- contaminated so badly that most of those waters have advisories warning people to limit or avoid fish consumption. NYS has both general (The entire State is under a no more than 1 meal per week (½ pound) blanket advisory) and specific advisories for fish and shellfish, with the information on the NYS Department of Health website.

Strategy Highlights:

The Region will continue its monitoring efforts with the states, particularly in the USVI, coordinate fish survey activities for the National Study of Chemical Residues in Lake Fish Tissue, and support the Comprehensive Coastal Water Quality Information Network EMPACT project in southern NJ in coordination with NJDEP. This project includes remote water quality monitoring and an evaluation of toxics in shellfish. To address differences in data availability within the Region, we will work on targeted efforts, where funding is available, to encourage consistency in methods, classifications, and reporting.

Region 2 DESA provides water quality monitoring support to the states in order for the states to fulfill their commitment to the National Shellfish Sanitation Program, with the Food and Drug Administration. The Region is looking into utilization of the national Shellfish Information Management System.

See Subobjective 2.2.2 with respect to the Region’s activities on contaminated sediments.

Strategies	Tools/Programs
Reduce risk of eating contaminated fish	Monitor fish tissue in Virgin Islands [DESA] Supply water quality data to the states as part of the National Shellfish Sanitation Program [DESA] Work cooperatively with Indian Nations to develop overall plans to assess contamination levels of fish in waterbodies of interest to the Indian Nations [DESA] Assist in the development of TMDLs for the Delaware Estuary and LIS which focus on tissue contamination

Goal 2: Clean & Safe Water
Objective 2.1: Protect Human Health
Subobjective: 2.1.3 Water Safe for Swimming

Current State /Major Problems to be Addressed:
In FY2003: 100% of NJ's priority beaches, approximately 326 ocean and bay recreational swimming beaches were monitored once a week from May through September. Closures occurred on a total of 188 days; ocean beach closures occurred 58 times due to precautionary rain models, 13 times due to floatable debris wash up, and 9 times due to high bacteria counts; bay closures occurred 82 times due to high bacteria counts and 26 times due to precautionary rain models. 100% of VI's 59 priority beaches were monitored on a quarterly basis, once every three months. Approximately 75% of NY's 317 priority beaches were monitored once a week, with the remaining 25% monitored on an as needed basis. 100% of PR's 22 priority beaches were monitored monthly. Closure/advisory data for NY, VI and PR are not available.

The FY2003 Regional Helicopter Program successfully sampled forty-four New Jersey ocean beaches and twenty-six Long Island ocean beaches. The New York/New Jersey Harbor complex was surveyed for floatable debris six days a week to prevent local beach closures. NJ and PR has completed fecal coliform TMDLs to meet fecal water quality standards (freshwater).

Strategy Highlights:
The strategy the Region will use to achieve the goals of this objective consist of providing scientific technical assistance, quality

assurance oversight, and reviewing and approving States monitoring strategies and BEACH grants. The monitoring strategies will be updated to include the "Elements of a State Water Monitoring and Assessment Program". All monitoring strategies and BEACH grants will be reviewed and approved by the Region. The BEACH grants administered by EPA are for monitoring and notification only; all data obtained will be stored in STORET. It should be noted that although the implementation grants have been awarded, the QAPPs have not been approved for NY, PR or VI. Accordingly, data has not yet been collected under the grants. Once the QAPPs are approved, data will be collected and made publically available. Any further action to improve beach water quality would be a goal of other programs such as TMDL, 303d, point and nonpoint source.

New Jersey State programs including aerial surveillance, Adopt a Beach, and Clean Shores Inmate Labor will continue to help prevent beach closures due the wash up of floatables. The Regional Helicopter Monitoring Program will continue in FY2004 and foreseeable future. State grants will be awarded to implement the BEACHES Program. The Region will continue to work with states to develop TMDL's to restore water quality for swimming.

It is not likely that the Region will need to divest entirely from any national activities, but through necessary short and middle-term prioritization, may delay implementation or completion. Currently, the Region is on target to meet its contribution toward the Agency's 2008 goal.

See Subobjectives 2.2.1 and 2.2.2 with respect to improving water quality on watershed basis and coastal waters.

Strategies	**Tools/Programs**
Protect beaches	NY Bight Beach Monitoring using R2 helicopter [DESA] Issue Beach Grants to protect and monitor bathing beaches to protect public health [DESA]
Establish and approve TMDLs	EPA contracts used to establish TMDLs with NY, NJ, PR, VI or to enable EPA to establish TMDLs directly, and consult with Indian Nations regarding TMDLs on waterbodies within each Nation's respective geographic area of interest [DEPP]

Goal 2: Clean & Safe Water
Objective 2.2: Protect Water Quality
Subobjective 2.2.1: Improve WQ on a Watershed Basis

Current State /Major Problems to be Addressed:
% of waters that are monitored (2002): In NJ: 55% of non-tidal rivers, 77% of tidal rivers, 100% of estuaries/coastal waters, 11% of lakes. In NY: 18% of rivers/streams, 32% of lakes/reservoirs, 100% of estuaries/ocean coasts, 80% of Great Lakes shores. In PR: 31% of rivers/streams, 99% of lakes/ lagoons, 34% of coastal waters. In VI: 100% of all waters. [These numbers do not reflect the adequacy of monitoring programs (e.g., VI does not monitor for toxics, but is able to report 100% of its waters monitored for conventional parameters).]

Percent of monitored waters that are impaired (2002): In NY: 2% of rivers/streams, 37% of lakes/reservoirs, 41% of estuaries, 0% of ocean coasts, 70% of Great Lakes shores. In PR: 20% of rivers/streams, 99% of lakes/lagoons, 0% of coastal waters. In VI: very small percent, not readily available. In NJ: very large percent, not readily available. [These numbers do not reflect the large numbers of waters with insufficient data to make a determination.]

The watershed impairments are based on limited data. Not all waters are monitored; many are only assessed. There is inadequate funding for comprehensive watershed monitoring. As such, impairments as identified are primarily water-body, or water reach specific.

Strategy Highlights:
The Region generally follows the national program, with special emphasis on increasing the number of TMDLs developed and approved. The states have prioritized their watersheds through the Clean Water Action Plan's Watershed Restoration Action Strategy requirements. Additionally, the states have received Congressional line-item funding for targeted watersheds. As funds are available, we will assist the states in conducting targeted studies to improve the databases with the states.

As noted, the current Integrated Reporting mechanisms are not conducive to reporting on a watershed basis because the focus is primarily on discrete assessment units. To improve the ability of states to assess and report on water quality at the watershed level, Region 2 will do the following:

C conduct state by state Integrated and 305(b) reporting meetings to discuss the strengths and weaknesses of the latest reports and to offer suggestions and assistance,

C coordinate multi-state and multi-region groups and workshops to facilitate reporting within the individual state and on interstate waters, including a. 2004 305(b)/303(d) Integrated Report Workshop for Region 1 and 2 States and working with. Delaware River Basin Commission, Region 3 and the States of PA, DE, NY, and NJ on Delaware River Main Stem Assessment.

C participate in the 2006 Integrated Report Guidance Workgroup to refine assessment methodologies and reporting techniques.

C Work with the States to develop Long-Term Monitoring Strategies as per the *Elements of a State Monitoring Program* document, which identifies gaps and makes the state define short and long-term monitoring objectives that improve assessments for 305(b) and 303(d). Earlier this year, the Region 2 RA transmitted the *Elements* to the states in the Region and expressed interest in working with them to incorporate the *Elements* into their Section 106 grant programs to enable the states to incrementally improve their strategies.

The Region expects, through improved reporting, working with the states, improving monitoring and working on targeted watersheds, to significantly contribute to achieving national targets. **(See Chapter 3 Partnerships section.)**

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	Tools/Programs
Ensure that state water quality standards (WQS) are set and periodically revised.	NY, NJ, PR and VI WQS review/revision processes [DEPP] National Strategy for Water Quality Standards and Criteria [DEPP] ESA Coordination/Consultation with FWS and NMFS [DEPP] National Nutrient Criteria Program (technical assistance, grants, contracts) [DEPP] Monitor nutrients along NJ coast for OW for nutrient criteria development [DESA]
Ensure that Indian Nation water quality standards (WQS) are set.	"Treatment as State" application/approval process [DEPP] Tribal WQS review/revision process [DEPP] National Advance Notice of Proposed Rulemaking process [DEPP] Culturally-based Water Quality Standards [DEPP]
Establish and approve TMDLs	MOAs and Quarterly TMDL meetings with NYSDEC, NJDEP, and PREQB [DEPP] EPA Contracts used to establish TMDLs with NY, NJ, PR, VI or to enable EPA to establish TMDLs directly [DEPP]
*Provide oversight and build state capacity to reduce point source discharges.	Oversee NY, NJ, VI state NPDES programs [DEPP] Implement NPDES program in PR [CEPD, DEPP] Clean Water State Revolving Fund [DEPP]
*Provide oversight and build state capacity to reduce non-point sources	State NPS Management Program Strategies [DEPP] Coastal Zone Act Reauthorization Amendments (CZARA) Section 6217 [DEPP]
*Enable Indian Nations to reduce point and non-point source discharges.	CWA319 NPS grant funds [DEPP] STAG funds for sewage infrastructure [DEPP] Explore funding options for non-TAS consortium Indian Nations [DEPP]

Strategies	Tools/Programs
*Support state development & implementation of plans to reduce run-off from agricultural lands.	NY Agricultural Environmental Management program [DEPP] VI's enforceable conservation and Earth change permits[DEPP] PR permit/inspection program [CEPD] NJ's voluntary conservation plans administered under the State's Agriculture Retention and Development Act [DEPP]
*Reduce impact of animal feeding operations on waters.	State CAFO enforcement strategies [DECA] Partnerships with State Agricultural Agencies. [DEPP]
*Reduce impact of run-off from urban & suburban development.	State CSO & SSO strategies [DEPP] National SSO Policy [DEPP] NY, NJ, VI NPDES storm water programs [DEPP] EPA storm water program in PR [CEPD] Mid-Atlantic Federal Partners for the Environment (MAFPE)Protect beaches MOA to reduce Urban Sprawl [DEPP] Projects that pilot the Smart Growth Index model and Livability Grants awarded that promote Smart Growth [OPM] Urban Resources Partnership/NY City initiatives [DEPP] Explore innovative approaches by participating in the NYC Green Roof Policy Task Force [OPM]
Improve ability to assess & report on water quality	Conducting State by State educational seminars on the strengths and weaknesses of the individual State CWA 305b reports & 303d lists, coordinating workshops on interstate waters, working with the States to develop long term monitoring strategies and participating in the 2006 Integrated Report Guidance Workgroup to refine assessment methodologies and reporting techniques [DEPP] STORET, PCS, USGS databases

Goal 2: Clean & Safe Water
Objective 2.2 : Protect Water Quality
Subobjective 2.2.2: Improve Coastal and Ocean Waters

Current State/Major Problems to be Addressed:
The 2001 National Coastal Condition Report for the Northeast Coast indicated that the estuaries have good water clarity, fair DO, high wetlands losses, and ranking poorly regarding eutrophic condition, sediment contamination, benthic condition , and fish contamination.

The New Jersey Comparative Risk Project (7/30/03) stated that invasive species pose serious ecological threats to several New Jersey ecosystems.
Lakes Erie and Ontario, identified as coastal waters through CZARA, are impacted by the presence of non-indigenous species that degrade aesthetics; degrade phytoplankton, zooplankton, fish, and benthic populations; and contribute to habitat losses. Nuisance aquatics are not investigated as part of the Great Lakes strategy.

Urban and storm water runoff and CSOs are cited as primary sources of water quality impairment in the estuary waters of New York State.

Strategy Highlights:
Dredging of sediments alone will not achieve the national goal. The Region has been developing sediment decontamination in our effort to better achieve this goal. This strategy is consistent with a congressional mandate that specifically targets development of sediment decontamination technologies for dredged material. Sediment decontamination can have additional applications beyond the dredging program in cross-program applications in Superfund, aquatic brownfields (e.g., Gowanus Canal, Newtown Creek), and National Estuary Program implementation goals.

Three technologies have undergone pilot-scale implementation through the NY/NJ harbor Sediment Decontamination Program and will be undergoing full-scale demonstrations with commercial-scale equipment. The success of these demonstrations from an environmental and economic perspective would rapidly move into the next phase of commercial-scale implementation in the Port of NY/NJ. These technologies are also being integrated into the Superfund Program as it relates to the Passaic River and the Gowanus

Canal (aquatic brownfields). Sediment decontamination of Passaic River sediments is an integral component under EPA Superfund RI/FS process. Sediment treatability demonstrations using existing technologies piloted under the sediment decontamination program are being developed for the Passaic River.

The Lake Ontario Lower Aquatic Food Web Assessment has completed a coordinated binational assessment of the status of Lake Ontario's aquatic food web to determine the ability of the lake to sustain current levels of fisheries following the introduction of exotic species. Over the next year the data set will be interpreted and recommendations will be developed for future monitoring approaches. Results could impact the amount of fish stocked and harvested. A TMDL for pathogens is being developed for the NY/NJ Harbor. CSO abatement plans are also being developed process. The Region will continue to work with its State partners to ensure completion and implementation of these products to reduce the pathogen load into the coastal waters.

See Subobjective 4.3.1: Protect and Restore Ecosystems (Natl. Estuary Program)with respect to the Region's activities in the estuaries.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs**
*Provide oversight and build state capacity to reduce non-point sources	State NPS Management Program Strategies [DEPP] Coastal Zone Act Reauthorization Amendments (CZARA) Section 6217 [DEPP]
Monitor the impacts of invasive species	Northeast Rapid assessment Aquatic Invasive Species Survey (DEPP) Lake Ontario Lower Aquatic Food Web Assessment (LOLA)

Strategies	Tools/Programs
Ensure that POTWs with ocean discharges continue to meet their 301(h) modified NPDES requirements and have no adverse impacts on PR & VI coastal waters, and that the tow VI WWTPs withdrawn from the 301(h) program are upgraded to secondary treatment.	Inspections to ensure CWA 301(h) variance decisions are implemented [CEPD, DESA, DECA] VI wastewater infrastructure funding [CEPD]

Reduce and monitor impacts from aquatic dredged material placement activities	Dredged material testing evaluation framework (to determine suitability of dredged material for use as Remediation Material at HARS) [DEPP] HARS Testing Evaluation Framework [DEPP] MPRSA Site Management and Monitoring Plans (SMMPs) for all EPA Region 2 ocean dredged material placement sites CWA Monitoring
Reduce Ambient Sediment Contamination	TMDLs NEP Implementation Superfund Dredged Material Management Cross Program Implementation for sediment related issues

Implement and incorporate sediment decontamination technologies into existing programs	Water Resources Development Act projects (for development of sediment decontamination technologies) Superfund Brownfields NEP Implementation Dredged Material Management Cross Program Implementation for sediment related issues

Goal 2: Clean & Safe Water
Objective 2.3: Science and research
Subobjective 2.3.1: Apply the best available science

Current State /Major Problems to be Addressed:
See above objectives for discussion of environmental and human health conditions.

EPA has identified sound science and credible data as a guiding principle the Agency will follow to fulfill its mission to protect human health and environmental quality. Region 2 along with its state and tribal partners, rely on science, technology, and scientifically defensible data and models to evaluate risk, develop and defend protective standards, anticipate future health and environmental threats, and identify and enforce solutions.

The Division of Environmental Science and Assessment, through its scientific and technical support services, provides a solid foundation for decision making by a wide variety of environmental programs and initiatives. The full service DESA Laboratory (Chemistry, Biology and Microbiology) and its multi disciplinary staff of chemists, biologists, engineers, and other scientists and professionals, serves as the primary provider of scientific and technical expertise and environmental data for the Region, states and tribes that ensure that program implementation decisions are based on sound science.

The Division of Environmental Science and Assessment's focus is on producing quality field and analytical data necessary to make a variety of environmental decisions. DESA will continue its existing efforts to assure environmental data of acceptable quality that can be used to make sound environmental decisions by conducting laboratory evaluations and investigations, data validations, quality

assurance management and project plan reviews, and managing regional quality assurance programs and analytical services/support contracts. Each state and tribal organization receiving EPA funds provides a quality management plan (QMP) for EPA review and approval.

The Region will continue efforts to expand and improve upon existing state, tribal and local capacity to identify baseline community and ecosystem health conditions in priority geographic areas. For example, the Region participates in the Office of Research and Development (ORD's) Regional Environmental Monitoring and Assessment Program (REMAP) to assist it with assessing the status and trends of ecosystem health in priority geographic areas. Another example is the continued implementation of the Beach Monitoring Program which utilizes a helicopter to collect samples from the NJ and Long Island coastal waters for analysis by the Regional Laboratory.

The Region will support and facilitate the efforts of the National Environmental Laboratory Accreditation Conference (NELAC), a voluntary association of State and Federal Agencies and private organizations formed to establish and promote mutually acceptable performance standards for the inspection and operation of environmental laboratories. Through its NELAC efforts, the Region will ensure that decisions being made from analytical data have a sound technical, scientific, and statistical basis and that laboratories deliver data of the required level of quality. Regional support includes participating and supporting the National Environmental Laboratory Accreditation Program (NELAP) efforts at implementing the NELAC standards.

DESA will participate in the NELAP Standards Gap Analyses, which will be performed by an independent third party. Additionally, the Region is focused on updating existing and old, outdated regional laboratory equipment to increase effectiveness in investigation, monitoring, and analytical activities and to maintain state-of-the-art capabilities.

It is not likely that the Region will need to divest entirely from any national activities, but through necessary short and middle-term prioritization, may delay implementation or completion of some. Currently, the Region is on target to meet its contribution toward the Agency's 2008 goal.

Strategy Highlights:
Generally follows national program.

Strategies	Tools/Programs
Ensure biological integrity of the Region's waters	Validate lake & estuarine bioassessment protocols [DESA] Improve fish IBI and stream bioassessment protocols [DESA]
Improve environmental measurements carried out in support of monitoring activities to ensure that data are of known, documented and acceptable quality	SDWIS/Data Reliability Action Plan [DEPP-WPB] Review/update field and laboratory Standard Operating Procedures to ensure validity and accuracy of measurements [DESA] The Region will support and facilitate the efforts of the National Environmental Laboratory Accreditation Conference (NELAC), a voluntary association of State and Federal Agencies and private organizations formed to establish and promote mutually acceptable performance standards for the inspection and operation of environmental laboratories. [DESA] DESA will continue its existing efforts to assure environmental data of acceptable quality that can be used to make sound environmental decisions by conducting laboratory evaluations and investigations, data validations, quality assurance management and project plan reviews, providing technical assistance as requested and managing regional quality assurance programs and analytical services. [DESA]
Increase Indian Nations' monitoring programs and data assessment abilities	305b reports [DEPP]

Strategies	Tools/Programs
Enable Indian Nations, states and local agencies to produce data of known, documented and acceptable quality for their intended purposes	DESA will continue its existing efforts to assure environmental data of acceptable quality that can be used to make sound environmental decisions by conducting laboratory evaluations and investigations, data validations, quality assurance management and project plan reviews, providing technical assistance as requested and managing regional quality assurance programs and analytical services. Each state and tribal organization receiving EPA funds provides a quality management plan (QMP) for EPA review and approval. [DESA]
Improve data interpretation capabilities in Region 2	GIS Team [OPM]

Goal 3: Preserve & Restore Land
Objective 3.1: Preserve Land
Subobjective 3.1.1.: Reduce Waste Generation and Increase Recycling (MSW)

Current State/major problems to be addressed:
REGIONAL PARTNERS WORKING WITH US TO REDUCE WASTE GENERATION AND INCREASE RECYCLING: Region 2 has developed unique relationships with our states, state organizations, local universities and local governments that have allowed us to participate in over 60 projects designed to reduce waste generation and increase recycling. A major partner is the Northeast Waste Management Officials Association (NEWMOA). Regions 1 and 2 (along with both New York and New Jersey) participate in the association that is involved with over 50 ongoing projects designed specifically to meet the needs of our regional waste minimization, pollution prevention and recycling programs. In addition, much is gained through work sharing and technology transfer between Region 1 and 2 along with our states that has lead to rapid development of projects and programs.

REGION 2 PLANNING TO GO BEYOND NATIONAL GOALS FOR 2008: Through our strong partnership arrangements, the

Region intends to develop specific goals for individual waste streams dealing with reduction, re-use and recycling for 2008. Some of the specific waste streams being worked on include electronics, hospitals, mercury, lead, construction and demolition debris, and tires. The following table lists a few of the many projects that deal with high priority waste streams for Region 2.

RESOURCE CONSERVATION CHALLENGE (RCC): Region 2 is participating on the RCC workgroup and is involved in program development and implementation. We are also the national lead for the Hospitals and Health Care Sector. Through the use of self audits and EMS programs, the Region has teamed with 25 hospitals in implementing pollution prevention activities and have documented results dealing with environmental and cost saving benefits. The effort will be expanded through the coming years.

RCRA (2003): 133 operating facilities of which 121 (91 %) have approved controls in place to prevent releases to the environment. 68 post-closure facilities of which 52 (77%) have controls in place to prevent releases to the environment. Those operating facilities which have controls in place, are permitted facilities that have conditions requiring waste minimization and periodic reporting of waste minimization achievements.

Project XL - Region 2 continues to work on the development and implementation of an innovative pilot project which encourages the recycling of hazardous sludges, potentially generated by a wide variety of industrial sectors, by substituting them for raw feedstock in the cement-making industry. If successful, this Region 2 project will have broad application nationwide and result in the recycling of many thousands of tons of a useful commodity that would otherwise be landfilled.

Various compliance assistance efforts that have been undertaken by the region have also helped reduce waste generation (e.g., see the lead shot initiative described subobjective 5.1.1)

Strategy Highlights:

Region 2 promotes waste minimization source reduction and recycling through a variety of mechanisms including: funding activities, negotiation of commitments promoting conservation practices, information outreach through the development of websites, fact sheets, and workshops that focus on different sectors.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	Tools/Programs
*Promote waste minimization, source reduction, and recycling	**NOTE: DEPP, OPM and DECA Involved in all Tools listed Below** **Electronics**: The Region works with our states to develop a product stewardship approach to used electronics to facilitate environmentally sound and cost effective strategies that encourage the collection of computers, televisions, and other electronic devices. Our activities will include managing the Used Electronics Regulatory Workgroup, participating in the National Electronics Product Stewardship Initiative on Used Electronics Management. Region 2 provided funding to INFORM to research and produce the document "Waste in the Wireless World: the Challenge of Cell Phones" . **Green Buildings:** We will work with New York City to encourage Green Building practices. This includes sponsoring a cost/benefit analysis of the LEED standards as they would apply to NYC; sponsoring a design competition. We will negotiate commitments with both NY and NJ to promote Green Building practices and build on previous work. Promote green building practices in urban centers such as Newark, Hoboken, or Montclair, NJ as well as Buffalo and Peekskill, NY. **Lead, Cadmium, and Mercury:** Region 2 has developed fact sheets on lead and cadmium that include case studies, success stories & costs savings, as well as websites for guidance and outreach purposes. This material will be provided to facilities to assist them in reducing, substituting and eliminating the priority chemicals that are being used in their products. The Region has developed extensive P2/Waste Min websites by sectors. The Region is working with the our states to identify facilities for Resource Conservation Challenge (RCC) Partnership for Waste Minimization Priority Program. We are working with NEWMOA, states, and industry for outreach & education on mercury and lead and cadmium reduction in the steel cable coatings, plasticizers and the electronics sectors. To encourage mercury reduction, the Region is assisting states in developing state rules to reduce emissions of mercury from electric power stations, iron, steel & other secondary smelting industries and to promote energy efficiency. NJDEP has implemented a mercury auto switch recovery program through a Region 2 grant. **Sector Approaches:** Region 2 holds numerous workshops with the metal finisher and electroplating sectors to help metal plating operators to reduce the use of cadmium, lead, mercury, chromium, cyanide, and selenium. As a result

Strategies	Tools/Programs
	of these workshops, the Region has developed Best Practices Placards for line operators that contain various pollution prevention techniques. We have an ongoing initiative with Hospitals and Health Care Institutions for virtual elimination of mercury, dioxins & furans and other priority chemicals using an EMS. We now have over 25 hospitals signed up to reduce wastes and increase energy efficiency. Ongoing effort with Federal Facilities to employ replacements for cadmium and chromium. P2/Waste Minimization Roundtables for refinery and chemical sectors to reduce TRI emissions. Region 2 is on the national work group to promote Coal Combustion Products Partnerships (C2P2) in the Industrial sector. Through NEWMOA, we will assist states in tracking C&D generation, processing, disposal capacity, and end use markets. We will hold two meetings and four conference calls for the Auto Recycling Workgroup and will assist states with their strategies to improve the management of auto recyclers and junkyards. **WasteWise:** Region 2 became a partner in fall of '02 and established our goals by 03/03. We coordinated our work with the EMS team since our goals fit well within the scope and outline of that program. WasteWise goals will use the EMS to meet program deadlines. We intend to strongly promote the program and enlist business partners.

Goal 3: Preserve & Restore Land
Objective 3.1: Preserve Land
Subobjective 3.1.2.: Manage Hazardous Wastes and Petroleum Products Properly

Current State/Major Problems to be Addressed:
Underground Storage Tanks (USTs) (2002): *For states:* 58,805 active tanks and 120,107 closed tanks; 28,203 confirmed releases, 26,563 cleanups initiated, 20,673 cleanups completed; 7,530 cleanup backlog; 546 emergency responses. 71% in significant operational compliance (SOC) with release prevention and 75% in SOC with leak detection regulations. *For Indian Nations:* 179 active tanks and 21 closed tanks; 6 releases, 1 cleanup initiated, 0 completed; 6 cleanup backlog; 2 emergency responses. No data on SOC. We intend to conduct UST inspections to enhance SOC.

RCRA Permits and Approved Controls : There are 201 facilities in the permitting universe. At the end of FY' 03, 173 facilities had permits with approved controls in place which represents the highest percentage in the nation. We intend to exceed the 2008 goal of 95 %.

RCRA Hazardous Waste Combustion Facilities: The region has 18 Hazardous Waste Combustion facilities that require permitted controls to reduce emissions. By the end of FY' 03, 17 of the 18 facilities had controls in place and the last permit is expected to be issued by the end of 2005.

RCRA Standardized Permit Rule: Region 2 is the lead Region for assisting OSW in the development of the RCRA Standardized Permit Rule that is expected to be final in 12/04. This rule will allow up to 75% of the permitted universe to operate under a standardized permit that relies on specific performance measures. This will allow permit staff to focus more on pollution prevention and the Resource Conservation Challenge aspects of the RCRA program in later years.

Strategy Highlights:

The region has provided funding to ensure improved State and Indian Nations' management of USTs. Outreach-oriented tools and programs have improved the operation of municipal waste transfer stations, the capacity of Indian Nations to manage their waste sites, and local government's capacity to remove hazardous wastes.

Additional compliance and enforcement activities under subobjective 5.1.1 complement the activities in the table below to achieve proper management of hazardous wastes and petroleum products.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	Tools/Programs
Provide oversight and build state capacity to manage USTs and clean-up LUST sites.	State UST and LUST funding [DECA] Brownfields for Abandoned Sites Initiatives [DECA] UST inspections (leak detection, corrosion protection, spill and overfill protection) [DECA]
Assist Indian Nations in promoting UST compliance and corrective actions	Indian Nation UST funding [DECA] Leak detection, corrosion protection, spill and overfill protection [DECA]
*Ensure that RCRA facilities have controls in place to reduce as well as prevent releases	RCRA operating permits & post-closure permits [DEPP] Financial assurance reviews [DEPP] Focus on land disposal, combustion, open burning/open detonation, and interim status facilities [DEPP & DECA] Pursue dialogue on homeland security issues at RCRA facilities [DEPP]
Provide oversight and increase state ability to manage their waste sites	"Express Authorization" provisions [DEPP, DECA]
Assist states to improve operation of municipal waste transfer stations (WTS)	WTS best practices manual [DEPP]
Build capacity of Indian Nations to manage their waste sites	Open dump characterizations and removals [DEPP] Solid waste demonstration grants [DEPP] Tribal Circuit Rider [DEPP]
Build local governments' capacity to remove hazardous wastes	County household hazardous waste programs [DEPP]

Goal 3: Preserve & Restore Land
Objective 3.2. Restore Land
Subobjective 3.2.1: Prepare for and Respond to Accidental and Intentional Releases (emerg.prep./oil spills)

Current State/Major Problems Addressed:
Region 2 plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. Under the National Contingency Plan (NCP), and National Response System (NRS), Region 2 evaluates and responds to releases annually. EPA's primary role is to serve as the federal OSC for spills and releases in the inland zone. The Region has successfully contained releases of hazardous substances and oil spills, minimizing the adverse impacts on human health and the environment. For example, in fiscal year 2003, the Region 2 Oil Program accomplished the following: 220 Spill Prevention Control and Countermeasure (SPCC) inspections were conducted; six Facility Response Plan (FRPs) were reviewed; and, 14 FRP plans were approved. In addition, five SPCC complaints were issued, with four cases being settled for $235,000. The Region 2 Superfund removal activity conducted to respond to imminent threat(s) to public/environment included: 20 removal actions were started with 17 conducted by EPA and paid for by the Superfund Trust Fund; and, three conducted and paid for by responsible private parties.

Strategy Highlights:
Region 2 plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment and generally follows the national program. Region 2 will continue to develop technical personnel in the field, ensuring their readiness and protecting their health and safety when responding to releases of dangerous materials. Preparedness on a regional level is essential to ensure that emergency responders are able to deal with both regional emergencies as well as support multiple, large-scale emergencies, including those that may involve chemicals, oil, biological agents, radiological releases, or weapons of mass destruction. Over the next several years, Region 2 will enhance its core emergency response program to respond quickly and effectively to chemical, oil, biological, and radiological releases and will improve coordination mechanisms to enable response to simultaneous, large-scale national emergencies, including homeland security incidents.

Compliance assistance activities (i.e., the marina compliance assistance initiative) under subobjective 5.1.1. also help the region achieve this subobjective

Strategies	Tools/Programs
Enhance and maintain Region 2's preparedness to respond to nuclear, biological, and/or chemical terrorist events	Core Emergency Response [ERRD]
Respond to releases of hazardous substances and oil spills	Oil spill notifications, emergency responses, and removals [ERRD] Hazardous substance spill response [ERRD]
Oversee/build state capacity to respond to oil spills	Viable area contingency plans for states [ERRD] Area drills [ERRD]
Improve ability of facilities to respond to oil spills	Facility response plans (FRPs) [ERRD] Spill Prevention Control and Countermeasure (SPCC) inspections [ERRD]
Increase response capabilities	Information Technologies [OPM] COOP Planning [OPM]

Goal 3: Preserve & Restore Land
Objective 3.2. Restore Land
Subobjective 3.2.2: Clean up and reuse contaminated land (RCRA,UST,SF)

Current State/Major Problems to be Addressed:
Superfund (2003): Of the Region's 255 Superfund sites and four proposed sites, 120 sites (46%) have been cleaned up and deleted from the NPL or have all construction completed and are undergoing long-term remediation. Long-term remedies usually mean that continued pumping of contaminated ground water is required. Cleanup activities including either design or construction, or investigations or studies are under way at approximately 139 sites.

RCRA (2003): Region 2 has 140 of the 1714 high-priority corrective action RCRA facilities nationwide that require a human-exposures-controlled and groundwater- releases-controlled environmental indicator determination. Ruling out the indoor air pathway due to vapor intrusion has been a major issue in Region 2. For example, at some of facilities, groundwater concentrations are controlled

to below risk-based levels, but there are still indoor air problems. A further complicating factor is that many of our facilities are in close proximity to residential areas. Through close partnering with our states, the Region intends to resolve outstanding indoor air issues and meet or exceed all 2008 strategic targets for RCRA.

TSCA PCBs: With the high concentration of manufacturing facilities in Region 2, there have been many spills and other discharges of PCBs into holding ponds, treatment lagoons, and onto the soil in general. Region 2 works with the facilities to develop/review remediation plans for these areas, and to promote the removal and proper disposal of the PCB-contaminated materials.

Strategy Highlights:

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) provides the legal authority for the Region 2 Superfund Program. Region 2 works to clean up contaminated land to levels sufficient to control risks to human health and the environment and to return the land to productive use. Region 2 generally follows the national strategy to accomplish site cleanup. Consistent with the national program, Region 2 generally conducts four key steps to accomplish cleanups and control risks to human health and the environment: assessment, stabilization, selection of appropriate remedies, and implementation of remedies. We will continue to work with federal, state, tribal, and local governments, as appropriate, to identify sites requiring attention and determine which of those sites should be addressed under CERCLA, as opposed to other mechanisms. We are also devoting a very significant effort to ensuring that human health exposures and exposures through groundwater contamination at RCRA corrective action sites are being controlled, in accordance with the Agency's Environmental Indicator targets under the Government Performance and Results Act (GPRA).

Strategies	**Tools/Programs**
Prevent exposure to substances that pose an unacceptable risk to human health and the environment	Superfund Site assessment, removal, remedial, enforcement and federal facility response programs [ERRD] Dynamic Field Analytical Program [DESA] PCB Remediation Plan review, approval, and enforcement [DECA]
Implement Sediment Site Strategy: Upper Hudson, Passaic, Grasse River, Berry's Creek Superfund remedial/response actions	Superfund Site assessment, removal, remedial, enforcement response programs [ERRD]

Strategies	Tools/Programs
Continue and enhance efforts to complete construction at NPL sites	Superfund Site assessment, removal, remedial, enforcement, and federal facility response programs [ERRD]
Continue with Base Closure (NPL and non-NPL) activities	BRAC Program [ERRD]
Increase the number of acres of land made available for reuse	Superfund Site assessment, removal, remedial and enforcement programs. OSWER Land Revitalization program [ERRD]. RCRA Corrective Action Program [DEPP] PCB Remediation Plan review, approval, and enforcement [DECA]
Identify high priority Superfund sites and determine appropriate response actions	Identify sites posing highest risk (worst sites first) [ERRD] Evaluate backlog of sites in CERCLIS to determine high-priority sites [ERRD] Continue implementation of active site discovery program [ERRD] Use Geographic/Media Specific Special Initiatives to identify potential threats [ERRD] Establish inventory of formerly utilized defense sites (FUDS) [ERRD] Continue site assessment initiatives in PR & VI [ERRD] Records of Decision (RODs) [ERRD] Toxics source track down [ERRD]
Implement contaminated ground water site strategy	GIS database of vulnerable groundwater areas [ERRD] Site assessment, enforcement, education activities in PR & VI [ERRD] Implement low-flow and soil gas monitoring techniques [DESA]
Maintain effective contract management	Continue implementation of Superfund Long-Term Contracting Strategy and/or other national initiatives related to effective contract management [ERRD]

Strategies	Tools/Programs
Target RCRA remediations at high priority facilities	Assess and determine high-priority facilities [DEPP]
Control human exposure to contamination at high-priority RCRA facilities	Soil gas surveys for indoor air assessments [DEPP] RCRA Corrective Action Environmental indicator (CA725) [DEPP]
Control migration of contaminated groundwater at high-priority RCRA facilities	RCRA Corrective Action Environmental Indicator (CA750) [DEPP]
Select final remedies for cleanup at high priority RCRA facilities.	RCRA Corrective Action Measure "Remedy Selected" (CA400) [DEPP]
Complete construction of remedy for cleanup at high priority RCRA facilities.	RCRA Corrective Action Measure "Certification of Remedy Completion" (CA550) [DEPP]
Congressionally mandated closure of U.S. Naval Station Roosevelt Road in Ceiba, PR	RCRA Corrective Action program [DEPP].
Focus on prompt remediation on the Island of Vieques PR	Remediate the former AFWTF under RCRA corrective action Order [DEPP] Oversee response activities of former NASD under Superfund program [ERRD]
Address lower priority RCRA facilities	Technical assistance [DEPP]

Goal 3: Preserve & Restore Land
Objective 3.2. Restore Land
Subobjective 3.2.3: Maximize PRP Participation at SF Sites

Current State/Major Problems to be Addressed:
Superfund (2003): Of the Region's 255 Superfund sites and four proposed sites, 120 sites (46%) have been cleaned up and deleted from the NPL or have all construction completed and are undergoing long-term remediation. Long-term remedies usually mean that continued pumping of contaminated ground water is required. Cleanup activities including either design or construction, or

investigations or studies are under way at approximately 139 sites.

Strategy Highlights:
The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) provides the legal authority for Region 2 Superfund Enforcement Program. The Region uses Superfund Authority to clean up uncontrolled or abandoned hazardous waste sites and return land to productive use. Enforcement authorities are used to leverage private-party resources to conduct a majority of cleanup actions and to reimburse the federal government for cleanups financed by the Trust Fund. The Region 2 Superfund enforcement program generally follows national program.

The major elements of the Regional strategy include maximizing potentially responsible party participation at Superfund sites through enforcement first and cost recovery.

EPA Region 2 will continue to pursue the following two strategies for limiting the use of trust funds.

1) Applying Superfund "Enforcement First"- The Superfund program's "Enforcement First" strategy will allow EPA to focus limited Superfund Trust Fund resources on sites where viable, potentially responsible parties either do not exist or lack the funds or capabilities needed to conduct the cleanup. By taking enforcement actions at sites where viable, liable parties do exist, EPA will continue to leverage private-party dollars so that Trust Fund money is used only when absolutely necessary to clean up hazardous waste sites. 2) *Recovering Costs*- Cost recovery is another way to leverage private-party resources through enforcement. Under Superfund, EPA has the authority to compel private parties to pay back Trust Fund money spent to conduct cleanup activities. EPA will continue its efforts to address 100 percent of the Statute of Limitations cases for Superfund sites with unaddressed total past costs equal to or greater than $200,000 and to report the value of costs recovered.

Strategies	**Tools/Programs**
Maintain enforcement deterrent effect in Superfund program	PRP searches [ERRD] Alternative Dispute Resolution (ADR) [ERRD] Cost recovery action [ERRD]

Goal 3: Preserve &Restore Land
Objective: 3.3 Science & Research

National Sub-objective 3.3.1: Provide Science to Preserve and Remediate Land

Current State/Major Problems to be Addressed:
There are a number of sites within Region 2 that have been characterized as containing hazardous waste contamination that potentially impacts human or ecological health. These sites are currently in various stages of EPA remediation processes. Additionally, an even greater universe of predominantly urban sites have not been investigated, but remain undeveloped and unavailable for beneficial use due to the stigma of perceived or un-quantified hazardous waste contamination. Providing sound science/environmental data suitable to support appropriate investigation and remediation decisions is a challenge due to the large number of sites relative to available resources. Evaluating and developing appropriate quality assurance, quality control, and operating procedures for new and innovative data collection, data analysis, and remediation technologies to provide suitable scientific information both rapidly and at least cost will continue to be a major effort through 2008. Validity and veracity of scientific approaches and environmental data and information hinges on documented and verified science quality systems and quality assurance/quality control procedures for planning, data collection, data analyses, and data use phases of environmental projects.

Strategy Highlights:
The Region 2 approach is consistent with the national program strategy; leveraging EPA resources through the provision of state and local government grants and agreements to participate in the investigation and remediation process. Region 2 will continue to provide scientific technical assistance and quality assurance oversight of grantee and partner use of innovative technologies and procedures for scientific investigations and remediation activities at potential or existing sites impacting human health or the environment. Additionally, Region 2 has developed a regional mobile laboratory to provide rapid delivery of on-site analytical support to hazardous waste site investigations to supplement field and fixed laboratory analytical measurement options.

Strategies	Tools/Programs
Use data to target permitting activities	TRI & BRS databases to target facilities that are largest emission sources [DEPP] CAA ozone non-attainment areas (GIS) [DEPP]
Improve environmental measurements carried out in support of monitoring activities to ensure that the	Update field/laboratory Standard Operating Procedures to ensure validity/accuracy of measurements [DESA]

Strategies	Tools/Programs
data are of known, documented and acceptable quality	NELAP Accreditation [DESA] Documented Quality Systems [DESA] Technical and Quality System Assessments [DESA] Review Ecological Risk Assessments [DESA]
Enable Indian Nations, states and local agencies to produce data of known, documented and acceptable quality for their intended purposes	Review quality management/work plans [DESA] Technical and Quality System Assessments [DESA]
Integrate IT data analyses into routine business practice to build response capabilities	Information Technology [OPM] GIS Team [OPM]
Facilitate utilization of appropriate innovative field and mobile laboratory technology to minimize costs and improve timeliness of site characterization process.	Provide Region 2 Mobile Laboratory support and pilot innovative field measurement technologies on existing and potential hazardous waste site investigations. Provide training to Region 2 project managers and contractors on utilization of Dynamic Work Plans [DESA]

Goal 4: Healthy Communities & Ecosystems
Objective 4.1: Chemical, Organism and Pesticide Risks
Subobjective 4.1.1 Reduce Exposure to Toxic Pesticides

Current State/Major Problems to be Addressed:
Migrant farm workers in Region 2 are especially susceptible to pesticide exposure as they move among the truck farms throughout the region, and Region 2 has placed a special priority on protecting these workers. Pesticide usage in Region 2 also occurs in conjunction with numerous activities outside the agri-business mainstream, such as in the production and sale of produce at roadside markets, and in the control of West Nile Virus. Specialized monitoring is needed to ensure safe use of pesticides in these contexts. Finally, Region 2's large immigrant population and active port cities have fostered a high incidence of importation, sale and use of illegal pesticides.

Strategy Highlights:
Region 2 has been a national leader in developing and instituting a Comprehensive Worker Protection Standard Assessment program. The Region has also taken a leadership role in examining the significant amount of produce sold and consumed in New Jersey through roadside markets. These markets are not covered by the food monitoring done by the Food and Drug Administration. EPA Region 2 will continue to work cooperatively with the state to test various commodities obtained at roadside markets for specific pesticides commonly used on that crop.

West Nile Virus was first detected in the United States in the New York metropolitan area in 1999. Aggressive vector management through pesticide application has minimized the spread of this virus to human subjects, but little is known about the persistence of these pesticides in the environment. Region 2 maintains an extensive program of state cooperation and oversight in the application of larvicides and adulticides to control mosquitos.

Region 2 has taken an aggressive approach through multilingual outreach and appropriate enforcement to combat the sale and unsafe use of unregistered pesticides.

The Region is committed to implementing the core program including finalizing development of State Management Plans for all the states. Through the efforts outlined above, we believe that Region 2 will meet its share of the national goals.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs**
Support state efforts to determine levels of pesticides in produce crops not monitored by FDA	Grant dollars support state sampling and testing at roadside markets

Strategies	Tools/Programs
Promote safe application of pesticides for the control of West Nile Virus	Implement West Nile Virus surveillance operations
*Provide oversight and build state and tribal capacity to implement pesticide use/misuse regulations	1) Continued support of IPM organizations through grants 2) State incorporation of IPM training in delegated certification and training programs 3) State PESP grants 4) Joint state/federal implementation of the Comprehensive WPS Assessment program 5) Training and technical assistance for IPM and mosquito control 6) Resources to Indian Nations for health and safety equipment and monitoring
*Inform the public and enable them to participate in pesticides use decisions	1) Multilingual signs in public places to warn of the dangers of unregistered pesticides 2) Outreach to schools on integrated pest management 3) Marketplace sweeps for illegal pesticides 4) State Pesticide Incident Surveys and poison control hotlines 5) Urban IPM Outreach 6) Selected counties IPM Outreach
Assist the states in implementing state management plans that emphasize the protection of ground water aquifers as drinking water sources	1) Develop General State Management Plans in each state 2) Complete aquifer vulnerability assessments 3) Identify areas impacted by pesticide contamination through groundwater surveys
Promote Environmentally Beneficial Landscaping (EBL)	Provide compliance assistance on EBL, especially to federal facilities when they are subject to Executive Order requirements [DECA]

Strategies	Tools/Programs
Encourage hospitals to adopt IPM Programs	Provide compliance assistance materials as part of the hospital compliance initiative [DECA]

Goal 4: Healthy Communities & Ecosystems
Objective 4.1: Chemical, Organism and Pesticide Risks
Subobjective 4.1.2. License Pesticides Meeting Safety Standards (Registration)

All pesticide registration activity is conducted by Headquarters. The region does not receive any resources in this subobjective, and has no strategies to report.

Goal 4: Healthy Communities & Ecosystems
Objective 4.1: Chemical, Organism and Pesticide Risks
Subobjective 4.1.3. Reduce Chemical and Biological Risks

Current State/Major Problems to be Addressed:
Region 2 states have consistently had higher incidence of children with elevated blood lead levels compared to the national average. This is attributable to both the high occurrence of older housing stock, and the concentration of old industrialized urban areas. Another regional issue with specific impact on children is asbestos in schools. A 1996 study in New Jersey found that 76% of schools assessed were out of compliance with the AHERA (Asbestos Hazard Emergency Response Act) program.

The grant program for projects to decrease releases of persistent bioaccumulative toxic (PBT) chemicals is centrally funded and awarded in Headquarters, based on national competition. The PBT chemicals of greatest interest to the Region are mercury, PCBs, and dioxin.

As a highly industrialized region, with a high population density in close proximity to industry, Region 2 has a significant interest in reducing environmental releases of industrial chemicals and ensuring the proper disposal of PCB contaminated equipment.

Strategy Highlights:
Because children who are subject to one environmental stressor are generally also subject to others, the Region is continuing its program of a coordinated Children's Health Enforcement Initiative by focusing on school systems in counties and urban areas where state health department data show above average concentrations of children with elevated blood lead levels (EBL). This initiative includes lead-based paint disclosure inspections, Pesticide Program outreach on pesticide safety and integrated pest management (IPM), AHERA outreach and inspections, and outreach and assistance to ensure the implementation of EPA's 1991 guidance on reducing lead in drinking water in schools.

In addition to overseeing the current PBT grant to New Jersey to remove mercury switches from their government motor fleet, Region 2 wants to reach out to county governments in upstate New York to encourage the reduction of open burning in backyards to decrease dioxin emissions.

Supplemental to the Children's Health Enforcement Initiative, AHERA inspections in the Region are also conducted based on routine targeting and citizen complaints. The Region collaborates with Local Education Agencies and health departments to conduct AHERA

inspections and implement enforcement actions.

Reduction of environmental releases of industrial chemicals and the decision to dispose of PCB contaminated equipment are both voluntary activities. Region 2 advocates such reductions and disposal through outreach, compliance assistance recommendations, and the inclusion of reductions and proper disposal as Supplemental Environmental Projects in enforcement settlements. Through these efforts Region 2 will meet its share of the national goals.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs**
*Reduce risks to children	Children's Health Enforcement Initiative including: 1) Targeting aided by state health data on EBL in children 2) Lead-Based Paint Disclosure outreach and inspections 3) Pesticide Safety outreach and assistance to schools in the applicability of Integrated Pest Management 4) Outreach to school districts and inspections to promote compliance with AHERA 5) Coordination with school districts to test for and reduce lead in drinking water
*Support HQ PBT program	1) Oversee PBT grants awarded to Region 2 states/entities, such as the grant to New Jersey for removal of mercury switches from the government motor fleet 2) Reach out to rural counties to explore options for reducing backyard burning, and the associated production of dioxin

*Advocate reduction of environmental releases of industrial chemicals, and the safe disposal of PCB equipment	1) Conduct outreach seminars 2) Provide compliance assistance 3) Encourage inclusion of Supplemental Environmental Projects in enforcement settlements

Goal 4: Healthy Communities & Ecosystems
Objective 4.1: Chemical, Organism and Pesticide Risks
Subobjective 4.1.4: Facility Risk Reduction

Current State/Major Problems to be Addressed:
The states in the Northeast United States have high population concentrations in close proximity to industrial operations. For this reason, it is particularly important to address facilities posing the highest risk, and ensure that their facility risk management plans are sufficient and up to date, and that the impacted community is well informed and has incorporated facility risk information into its emergency preparedness and community right to know programs. In Region 2, the program for New York State is run by EPA, and the programs for New Jersey, Puerto Rico and the US Virgin Islands are run by the states with Regional oversight.

Strategy Highlights:
The Region will focus its efforts on high risk facilities, and high accident rate sectors in its program implementation, and in its oversight of state implementation. The Region will use both regulatory and voluntary strategies in close coordination with States. Regional resources implementing the program in New York will be used preferentially to focus on sufficiency inspections at high risk facilities rather than on review of Local Emergency Planning Committee (LEPC) plans. However, facility inspections will include confirmation that emergency preparedness exercises include local agency participation, and input will continue to be sought from LEPCs regarding facilities that are not currently reporting. Through these efforts we believe that Region 2 will meet its share of the national goals by 2008 to reduce risk of a major chemical accident at 30 percent of facilities, and to incorporate facility risk information into local plans at 50 percent of communities.

Strategies	Tools/Programs
In New York, identify and inspect highest risk facilities first, including facilities impacting populations greater than 100,000, and sectors that are prone to high accident rates	1) Conduct sufficiency inspections at high risk facilities 2) For POTWs and ammonia refrigeration facilities, review plans for key implementation elements
In New York, work cooperatively with Local Emergency Planning Committees to maintain LEPC preparedness	Provide CAMEO (Computer Aided Management for Emergency Operations) training to LEPCs.
Work cooperatively with delegated States to develop implementation strategies that emphasize high risk and high accident facilities	Develop implementation strategies with each state

Goal 4: Healthy Communities &Ecosystems
Objective 4.2: Communities
Subobjective 4.2.1: Sustain Community Health

Current State/Major Problems to be Addressed:
Over the last several years, Region 2 has been working with the many communities throughout the Region on innovative solutions to specific urban or rural environmental problems related to air and water quality, toxic substances, and solid waste management. Our work has included providing technical assistance and financial support. By working with key partners and leveraging the resources they bring to the table, we will be better able to ensure: 1) the long-term health of ecosystems and humans; 2) economic vitality; and 3) community well-being.

Strategy Highlights:
Our current efforts include working with the Regional Planning Partnership on piloting the Smart Growth Index model in Freehold, New Jersey, participating on the Earth Pledge Green Roofs Task Force, providing grant funds for livable communities work to communities and non-profits, and working with Westchester County, New York on a Low Impact Development Conference. We have also been partnering with the New York City Department of Environmental Protection and the Regional Plan Association on ways to promote a more sustainable New York City, and are co-sponsoring with the City a Green Building Design competition.

Over the next several years, we are looking to expand our partnerships to groups such as the New Jersey Higher Education Partnership for Sustainability and to increase our ability to provide assistance (both technical and financial). We would like to expand our outreach and technical assistance capacity for Low Impact Development work for storm water and urban wet weather control. Finally, we will research the application of Community-Based Environmental Management Systems (EMS) and their connection to smart growth and land use. We will explore the use of an EMS at the city/regional level so that environmental impacts from multiple stakeholders can be managed.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs**
*Promote Sustainable Development	Greening Lower Manhattan Initiative [OPM & DEPP] Innovations Exchange Network and Sustainability Speaker Series [OPM] Piloting Smart Growth Index Model [OPM] Membership in OASIS (Accessible Space Information System Cooperative) [OPM] Livable Communities Grant Program [OPM] Member Earth Pledge Green Roof Task Force [OPM] Technical assistance/outreach to promote Low Impact Development [OPM] Pilot use of Community based EMS linked to smart growth and land use [OPM] Co-sponsor the NYC Green Building Design Competition [OPM]

Goal 4: Healthy Communities & Ecosystems
Objective 4.2: Communities
Subobjective 4.2.2: Restore Community Health (EJ)

Current State/Major Problems to be Addressed:

To ensure the Region's programs take a consistent approach to integrating EJ in their decision-making, Region 2 developed a regional

environmental justice policy which was issued as an Interim Final document in 2000 (work on the policy began in 1994). The policy includes program-specific guidelines and uses unique GIS-based tools (EJ Demographic Screening Tool and Environmental Load Profile) to enable decision-makers to determine if a particular area is potentially subject to EJ considerations (i.e., does it meet the income and demographic criteria of the Agency's EJ policy). In 2004, the Region's "Interim Environmental Justice Policy" is slated to undergo a region-wide assessment to determine its effectiveness, as well as to establish a series of baselines for future assessments. Region 2's EJ Policy is consistent with the latest national EJ policy guidance and, in fact, the "National EJ Toolkit" encompasses a majority of the terms, factors and tools captured in the Region 2 EJ products, particularly for use in conducting EJ assessments.

Another focus of Region 2's EJ program has been to provide training to its employees. Starting in 1996, the Region was the first to mandate Region-wide environmental justice training, resulting in over 900 employees trained. As we move forward, the Region expects to offer full EJ training to new employees and refresher training to all other employees. We will also continue to offer EJ training to interested external groups (e.g., state agencies and academia) as part of the Agency's National EJ Training Collaborative efforts.

In addition to integrating EJ into EPA's decision-making, the Region plays an important role in assisting our state, local, and tribal partners in program development and capacity building. Under the EPA "State, Tribal Environmental Justice (STEJ)" grant program, the Region provided EJ program development "seed" monies to NJDEP and NYSDEC. These initial grants in 1998 and 1999 assisted both states in creating EJ Coordinator positions, EJ advisory councils/committees and state environmental regulatory policies on EJ. Through these mechanisms, the level of communication between Region 2 and our states on EJ matters has been greatly enhanced. As well, the accomplishments made toward furthering EJ at both NYSDEC and NJDEP serve, nationwide, as positive role models for other state departments seeking to establish their own EJ programs.

Another key element of our Region 2 EJ program is to foster open lines of communication with those communities which may experience a disproportionate share of environmental harm/burden. Historically, our Region has made the extra effort to engage communities by offering forums on a variety of topics: e.g., to learn of new regulations, provide feedback/comments to upcoming program decisions, informational sessions, grant writing workshops. While these events allowed for an exchange of information, the agendas were primarily set by EPA, not the recipients. To address this concern, Region 2 has also been convening EJ listening sessions (a.k.a. community dialogues) where the Region assumes the role of listener, instead of instructor. Following a highly attended and robust listening session in the US Virgin Islands in early 2003, the Region has become more in tuned with the "local environmental

issues" from the St. Croix residents. This effort has led to the formation of a regional task group aimed at working with the local St.Croix environmental agency, university and community residents to collectively address the concerns raised at the March session. The Region will continue to offer and host EJ listening sessions, either separately or as a collaborative venture between State/local government agencies and/or academia, as a means to educate and empower communities as well as to better apprize regulatory officials of local EJ concerns.

Lastly, another mechanism for gaining a greater understanding of local EJ-related issues is the formation of an external advisory committee. The National Environmental Justice Advisory Council (NEJAC) - Puerto Rico Subcommittee was created as a way for Region 2 to solicit opinions from the community on the implementation of EO 12898 (the "EJ Executive Order") in Puerto Rico. Funded specifically by Region 2, the NEJAC Puerto Rico Subcommittee is composed of residents representing various communities and sectors of government and industry. Through the experience and knowledge of its members the Region relies on the group to provide advice and recommendations as to how the Region can further promote public participation as well as foster more effective communication among the various stakeholders on the Island.

Strategy Highlights:
To further integrate EJ in the Region, each program division will be instructed to develop specific EJ-related protocols that take into consideration how EJ can be factored into specific media activities (e.g., targeting and priority setting).

As a member of the Agency's National Environmental Justice Training Collaborative, Region 2 has been a key player in assisting in the development of core training curriculum as well as serving as trainers of this national course. The Region also capitalizes on external forums (e.g, speaking engagement, panel discussions) as additional fora for EJ training purposes.

The Region plans to further host joint EJ community dialogue sessions with its state counterparts. Currently, the NYC Mayor's Office along with NYDEC are planning NYC borough-wide sessions in Spring 2004, while NJDEP and the Region are focusing on key urban centers in New Jersey for similar activities. With respect to the federally-recognized Tribes, the Region's longstanding practice of holding annual Indian/EPA leader forums (attended by the entire senior management team) exemplifies the level of importance we place in communicating with these unique sovereign governments.

Strategies	Tools/Programs
Ensure Regional program staff are equipped to develop and implement relevant policy, guidance, and strategies for integrating environmental justice into the Region's decision-making processes	Interim EJ Policy [EJ Coord, REJWG] Region 2 EJ Action Plans [EJ Coord, REJWG] Divisional EJ Implementation Plans [EJ Coord, REJWG, Divisional EJ subgroups] EJ Demographic Screening (GISTool) [EJ Coord & OPM] Environmental Load Profile (GIS Tool) [EJ Coord & OPM] Region 2 EJ training program [EJ Coord]
Expand outreach efforts to affected communities	EJ Listening Sessions/Community Dialogues [EJ Coord] EJ Small Grants Programs [EJ Coord]
Ensure that states, Indian Nations, local governments incorporate EJ into programs	NYSDEC EJ Advisory Group [EJ Coord] NJDEP Equity Advisory Council [EJ Coord] National EJ Training Collaborative [EJ Coord]
Address EJ concerns in PR and non-federally recognized Indian Nations	NEJAC Subcommittee for PR [CEPD] NEJAC Subcommittee for Indigenous people [DEPP]

Goal 4: Healthy Communities &Ecosystems
Objective 4.2: Communities
Subobjective 4.2.3: Assess and Clean Up Brownfields.

Current State/Major Problems to be Addressed:
As of 2003, Region 2 has 65 Brownfields Assessment Grants located in NY, NJ, PR (three of which are also designated as Showcase Communities); five Brownfields Cleanup Grants in NY, NJ; nine Brownfields Job training/Development Grants in NY, NJ, PR; and, nine Brownfields Cleanup Revolving Loan Fund Pilots in NY, NJ.

Strategy Highlights:
The Region 2 approach generally follows the national program. However, the region expands its approach by providing other

resources and services.

- EPA Region 2 Brownfields Inter-Agency Work Group (IAWG): This is a forum for EPA Region 2 Brownfields grants to share community revitalization goals, activities, and resource needs with agency representatives who can help them identify available resources.
- Brownfields Grantee Kick-off Workshops: Workshops are provided for new brownfields grantees, at the start of the grant period, to help organize the project, insure that all the critical stakeholders are informed about the project, and to get feedback from the community and other stakeholders present. The New Jersey Institute of Technology organizes the workshops for the Region.
- State Roundtable Meetings: Quarterly Roundtable meetings are held for all the EPA Brownfields Grantees in each state. The meetings are run by the Grantees and coordinated by EPA and the respective state, either New York or New Jersey.
- Technical Assistance to Brownfields (TAB): Is an technical assistance program for communities and municipalities that is managed by he Hazardous Substance Research Centers. Funding is provided to the centers by EPA to work with brownfields communities.
- Technical Outreach and Service to Communities (TOSC): Is another technical assistance program that is managed by the Hazardous Substance Research Centers, that provides technical assistance and guidance to communities affected by Superfund and Brownfields sites.

In addition, to accelerate development of identified Brownfields sites in a manner protective of Community Health, Region 2 will foster the use of appropriate innovative field technologies in concert with the Region 2 Mobile Analytical Laboratory to facilitate rapid Grantee characterization of the nature and extent of environmental pollutants at Brownfields sites.

Strategies	**Programs**
Provide oversight and build state capacity to facilitate the restoration, and redevelopment of brownfields program properties	Brownfields Grant Program [ERRD] RCRA Pilot Brownfields Study [DEPP] Targeted Brownfields Assessment Program [ERRD] Brownfields Areas [EJ Coord] Brownfields & Smart Growth/Green Buildings [PPEB]

Strategies	Programs
Provide oversight and build state capacity to facilitate the restoration, and redevelopment of brownfields program properties	Brownfields IAWG Resource Directory EPA Region 2 Brownfields Technical Assistance CD Demonstrate new field technologies [DESA] Use EJ GIS-based tools to assist in locating potential EJ communities EPA Region 2 Mobile Analytical Laboratory

Goal 4: Healthy Communities & Ecosystems
Objective 4.3: Ecosystems
Subobjective 4.3.1: Protect and Restore Ecosystems (National Estuary Program)

Current State/Major Problems to be Addressed:

Region 2 contains 6 of the Nation's 28 "Estuaries of National Significance" designated under Section 320 of the Clean Water Act within its boundaries either wholly or shared with other regions: Long Island Sound, New York/New Jersey Harbor, Barnegat Bay, San Juan Bay, Peconic Estuary and the Delaware Estuary. Long Island Sound **(See Chapter 3 Partnerships section)** and Delaware Estuary programs are administered jointly with EPA Region 1 and Region 3, respectively . These six estuary systems range from highly urbanized to rural watersheds.

All of these regional estuary programs share some level of concern regarding low dissolved oxygen, sediment contamination, fish and shellfish contamination, toxins and habitat restoration and protection. Half of the regional estuary program areas have experienced harmful algal blooms. Fish consumption advisories due to toxins in fish tissue are in effect in New York (Long Island Sound, New York/New Jersey Harbor, Peconic Estuary), New Jersey (New York/New Jersey Harbor, Delaware Estuary) and Puerto Rico (San Juan Bay). Additionally, each estuary has its own unique priority concerns as summarized below.

Lobster harvests in Long Island Sound have declined in recent years due to large-scale die-offs of unknown cause. Possible factors include pathogens, low dissolved oxygen, elevated water temperature and pesticides. Low dissolved oxygen levels have been a major concern in the Sound. Nitrogen loading has declined due to improvements in sewage treatment and accordingly, dissolved oxygen levels are improving in the Sound. However, summertime dissolved oxygen levels naturally fluctuate due to weather and other conditions and continued monitoring is needed to discern the effects of continued nitrogen reductions. Overall, recreational and commercial fisheries in the Sound have been and continue to improve, as do coastal bird populations.

In the New York/New Jersey Harbor Estuary contaminant levels in fin and shellfish are generally declining, but still of concern to human and environmental health. Concentrations of PCBs in striped bass have steadily declined in recent years and New York State is considering lifting the ban on commercial harvest. Sediment surveys in the estuary have determined that toxicity is of concern in most of the Harbor, but further study is needed to determine causes of the toxicity (i.e. a particular contaminant or the effects of the suite of contaminants). As water quality has improved, more shellfish harvesting has taken place in both New Jersey and New York either because it has become safer to consume shellfish from the Harbor or because improvements in water quality led to increases in shellfish

populations and increases in the number of people harvesting shellfish commercially.

In Barnegat Bay, a rural watershed, coliform bacteria loadings have resulted in shellfish harvesting restrictions as well as beach closures. The Bay is moderately eutrophic and nutrient and organic loading management are high priorities of the Barnegat Bay Estuary Program. Resolving conflict, between preserving the character of the area through resource preservation and protection and development (including the use of boats and personal water craft) is of special concern to the Barnegat Bay Program.

Management Topics in the Peconic Estuary are brown tide (a harmful algal bloom), nutrient over enrichment), restoration and protection of habitat and living resources, pathogens (and the resulting closure of beaches and shellfish beds,) and toxics.

Priority concerns in the San Juan Bay Estuary include point and non-point pollutant discharges, thermal pollution, habitat protection and aquatic debris. Aquatic debris is highly visible to the public and of special concern in the San Juan NEP.

Delaware Estuary Program priorities include managing toxins, dissolved oxygen, loss of habitat. Program objectives are restoration of fin and shellfish, restoration or maintenance of wildlife populations (birds, amphibians, reptiles, mammals), ecological diversity, stability, productivity and esthetic appeal and habitat protection.

Strategy Highlights:
Implementing the Comprehensive Conservation and Management Plans (CCMP) of the various estuary programs is the top priority for Region 2. The estuary programs are, by design, collaborative programs including stakeholders in the decision-making process. The management plans represent years of cooperation and negotiation to reach agreement among EPA, state agencies, other Federal agencies, and other interested parties. Accordingly, the regional priority is to support programs in achieving their individual goals.

Program priorities, which many of the programs share, include restoration and protection of habitat, reduction of the frequency and severity of hypoxia events, reduction of floatables, pathogens and toxins, as well as the reduction of anthropogenic impacts to living resources. To assess progress in accomplishing these goal several of the Region 2 NEPs have identified or are in the process of developing environmental indicators that will be measured every one to five years, depending on the program. These programs should be in place during the 2004 through 2008 time period. Many of these indicators were selected to represent environmental outcomes in water quality, habitat, etc.

In accordance with National Sub-objective 4.3.1: “Protect and Restore Ecosystems, Facilitate the ecosystem-scale protection and restoration of natural areas...” it is anticipated that Region 2 will contribute towards the EPA national goals to "protect or restore an additional 250,000 acres of habitat within the study areas for the 28 estuaries that are part of the NEP". However, because four of the six Region 2 estuaries are in highly urbanized watersheds, land available for habitat acquisition and restoration is very limited and costly. For example, the total acreage targeted for acquisition and restoration in the NY-NJ Harbor Estuary, is only about 4,500 acres. However, Region 2 is committed to working with its partners to acquire and restore as much habitat as possible. While some efforts are quite costly, others are accomplished more as a result of partners working together in innovative ways on a common issue. In early October, for example, the City of New York transferred three sites with important habitat value to the Department of Parks and Recreation at no cost, for management as habitat areas.
The other NEP Strategic Target, “By 2008, improve the overall aquatic system health of the 28 estuaries that are part of the National Estuary Program (NEP) compared to 2006, as measured using the National Coastal Condition Report and NEP indicators (Baseline to be determined in 2006)” is more difficult to assess from the vantage point of the present: the beginning of FY 2004. However, positive trends are being seen in the Region 2 estuary systems and the expectation and hope is that this will continue from 2006 through 2008 and beyond.

The Region will use a combination of strategies and programs to respond to environmental threats including the establishment and implementation of TMDLs on impaired watercourses to address point and nonpoint sources of nitrogen and other pollutants; strict enforcement of NPDES permits and modifications to address nitrogen, pathogens and toxic contaminants; expediting the nomination and approval of vessel waste No Discharge Zones in coastal waters to help alleviate pathogen contamination. Other tools to be used in the Region 2 program areas include agricultural BMPs and pollution prevention.

Strategies	**Tools/Programs**
Protect Estuaries of National Significance	Implement National Estuary Program CCMPs

Goal 4: Healthy Communities &Ecosystems

Objective 4.3: Ecosystems

Subobjective 4.3.2: Increase Wetlands

Current State/Major Problems to be Addressed:
Region 2 has approximately 900,000 acres of wetlands in New Jersey and 2.4 million acres in New York. A reliable estimate of wetlands in Puerto Rico is unavailable, but we estimate the total at 120 - 170,000 acres. The Virgin Islands have less than 2,000 acres of wetlands. Wetlands losses in the region continue to occur from both permitted and unpermitted fills, and non-fill impacts such as cutting of vegetation and non-point source runoff impacts. Some gains occur due to reversion of abandoned previously drained agricultural lands, but these altered landscapes will take a great deal of time to reach the value of more natural systems. These areas offer the best restoration opportunities.

The 2001 Supreme Court decision removing isolated waters and wetlands from federal jurisdiction has had an impact on wetlands resources in NY and PR, but quantifying this impact is difficult since all wetlands are not mapped, and many small areas are too small to be mapped via aerial photography. The decision had little impact on New Jersey's freshwater wetlands since the state program regulates isolated areas. Nationally, the state of New Jersey has one of the two state assumed programs. The Region's responsibility is to ensure that the program remains at least as stringent as the federal program.

Mitigation continues to be a focus. A recent study on mitigation by NJDEP shows that NJ has very similar problems with designing and monitoring successful mitigation projects as does the federal program. The National Mitigation Action Plan, announced last year, is an interagency effort intended to improve the ecological performance and results of compensatory mitigation for impacts to wetlands.

We recognize that permits can only address individual sites. One solution to this problem is large scale planning efforts on a watersheds basis. However, these efforts are very resource intensive and difficult to accomplish as evident by Region 2's efforts to enact a Special Area Management Plan (SAMP) for the Hackensack Meadowlands. Despite the failure to enact a formal SAMP NJ is following through on much of the draft SAMP's objectives which included measures to minimize fragmentation by creating greenways.. Another promising approach exists in each of our National Estuary programs which includes habitat protection and restoration activities which focus attention on these issues (see Subobjective 4.3.1). These activities have been more successfully building off the partnerships developed during the formulation of the CCMP. For example, the New York Harbor Estuary program has an acquisition map to preserve properties for their habitat values.

Strategy Highlights:
We are following the national program, but must note that EPA has limited ability to directly increase the acreage of wetlands since we

cannot provide the primary funding for wetlands and stream restoration projects. The Region supports wetlands/stream corridor restoration and monitoring of overall wetland health by providing general information to the public and local governments, funding wetlands grants and research, providing technical training, and in general encouraging good stewardship of wetlands resources. Where EPA does have a direct effect is in the review of Corps permits to fill wetlands. Wetlands impacts require mitigation projects, the effectiveness of which has been show to be inconsistent. To correct the deficiencies, a National Mitigation initiative has been implemented. The region will continue to work with HQ to implement this strategy. A recent workshop on ways to improve mitigation management was held for our national and state partner agencies. The region will continue to work with these partners in other meetings and conferences to further disseminate this and other mitigation improvement techniques as they are developed by the national strategy.

EPA seeks to build the capacity of all levels of government to develop and implement effective programs for wetland protection and management through the Wetland Program Development Grants. The three funding priorities are 1) Developing a comprehensive monitoring and assessment program; 2) improving the effectiveness of compensatory mitigation; and 3) refining the protection of vulnerable wetlands and aquatic resources. In order to achieve our national wetlands goals, Region 2 is investigating opportunities to expand and improve our grants process, including measures designed to generate an emphasis of EPA priorities, providing a means for coordination amongst previous, current and potential grantees, as well as EPA and other government and non-government entities in partnerships. In addition, we will continue to emphasize grant proposal review; feedback for both awarded and non-awarded grant applicants; grant monitoring and EPA participation; evaluation of the success of previous grants and repeat grantees; and providing support to increase the success rate of future grants and the quality of grant proposals. Region 2 will explore hosting an annual Wetlands Forum to provide a regular opportunity for exchange among federal, tribal, state and local agencies, previous current and potential grantees and the Region.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	Tools/Programs
Review wetland permit applications to ensure no net loss of wetlands	CWA 404/Rivers & Harbors Act §10 review authority
*Build state/local/tribal capacity to protect wetlands	Wetland State Grants and Wetland Protection Project Grants
*Support wetlands & stream corridor restoration, management and monitoring of wetland health.	Wetland State Grants Public Outreach: Website, publications distribution Develop comprehensive monitoring program
*Preserve environmentally sensitive areas in PR	SEPs & other enforcement tools; and Management Plans

Goal 4: Healthy Communities &Ecosystems

Objective 4.3: Ecosystems

Subobjective 4.3.3: Great Lakes Ecosystem

Current State /Major Problems to be Addressed:

Great Lakes: The Great Lakes ecosystem managed by Region 2 includes a small portion of Lake Erie, the Niagara River, Lake Ontario, a portion of the upper St. Lawrence River. All seven federally recognized Indian Nations are located in the watershed of the Great Lakes. Beneficial use impairments common to all these waterbodies include: restrictions on fish and wildlife consumption; degradation of wildlife populations; bird and animal deformities or reproductive problems. These impairments are attributed to the presence of elevated levels of toxic chemicals, and a number of critical pollutants have been identified for Lake Erie, Lake Ontario, and the Niagara River, where total of 18 priority toxics have been targeted for reduction. Since the mid-80s, hazardous waste site remediations; point source reductions; and toxic track down and remediation efforts have significantly reduced the concentration of toxics in both Lake Ontario and the Niagara River. Along the Niagara River and its tributaries, 247,000 cubic yards of contaminated sediments associated with hazardous waste sites have been dredged; and remediations completed at 18 of the 26 priority waste sites are estimated to have reduced potential toxic inputs to the river from hazardous waste sites by 93%. Due to these and other measures, reductions in the concentrations/loads of most of the River's priority toxics have exceeded 70% since monitoring began in 1986. At two sites along the

St. Lawrence River, 89,000 cubic yards of contaminated sediment have been removed to date and remediation alternatives are currently being examined to address another 2,000,000 cubic yards of PCB contaminated sediment along 7 miles of the Lower Grasse River. In Lake Ontario, PCB concentrations in lake trout have decreased over 3-fold from levels recorded in the late 1970s; and output from a PCB bioaccumulation model constructed for the Lake predicts declining trends will continue until approximately 2025 (achieving the strategic target value by 2007), when the Lake approaches steady state with its external loads. Although many priority chemicals indicate decreasing trends, trends for some pollutants have leveled-off in recent years, with monitoring data indicating much of the remaining loads now originate from sources upstream of the Niagara River and Lake Ontario. Region 2's Great Lake ecosystem has also been impacted by a loss of fish and wildlife habitat, in particular wetlands, which have experienced a 60% decline in acreage from 1780-1980. Lakes Erie and Ontario are also impacted by the presence of non-indigenous species that degrade aesthetics; degrade phytoplankton, zooplankton, fish, and benthic populations; and contribute to habitat losses. Finally, six of the 43 Great Lakes Areas of Concern (AOCs), are located in New York State. One AOC is currently in the process of being delisted and by 2010 another AOC should be designated as an Area of Recovery. Environmental problems identified within the remaining AOCs include many of the basin-wide impairments previously mentioned, in addition to eutrophication, algal blooms and beach closures.

Strategy Highlights:

Management of Region 2's Great Lakes ecosystems is accomplished through the Lake Erie and Lake Ontario Lakewide Management Plans (LaMP); Remedial Action Plans (RAPs) developed for the each of the six New York State AOCs; the Niagara River Toxics Management Plan (NRTMP); and through outreach conducted to the Indian Nations. For the NRTMP and the Lake Ontario LaMP, Region 2 works in partnership with NYS DEC, Environment Canada, and Ontario's Ministry of the Environment (the Four Parties **[See Chapter 3 Partnerships section]**). The NRTMP produces an annual progress report summarizing water quality and biomonitoring trends, efforts aimed at controlling point and nonpoint sources, and activities in the area of public involvement; an attached work plan outlines monitoring and management actions (e.g., point and nonpoint source controls, toxic track down and remediation efforts) to be undertaken both collectively and individually by the Four Parties to meet environmental goals. Region 2's NRTMP program also works closely with Superfund, RCRA and NYS DEC's Division of Environmental Remediation to produce an annual report detailing progress made in the remediation of 26 priority hazardous waste sites estimated to be responsible for 99% of the potential loading from these sources. Lakewide Management Plans are also updated regularly and contain work plans outlining actions to be undertaken towards the achievement of ecosystem goals. To assist in the evaluation efforts, each of the LaMPs have also identified several ecosystem health indicators, chosen for their reflection of lakewide conditions and their sensitivity to a number of stressors. Together, the suite of indicators selected for each lake provide a good characterization of ecosystem health across the entire foodweb. Finally, Region 2 also

works closely with NYS DEC to oversee and guide AOC RAP management to ensure that remediation and restoration activities are aimed at achieving ecosystem goals as well as delisting targets.

Strategies	Tools/Programs
Restore and protect the Great Lakes ecosystem	Lake Ontario Lakewide Management Plan (LaMP) [DEPP] Lake Erie Lakewide Management Plan (LaMP) [DEEP] Niagara River Toxics Management Plan (NRTMP) [DEPP] US Hazardous Wastesite Report [DEPP, ERRD] Remedial Action Plans (RAPs) [DEPP]

Goal 4: Healthy Communities &Ecosystems
Objective 4.4: Science and Research
Subobjective 4.4.1: Apply the best available science

Current State/Major Problems to be Addressed:
See above objectives and subobjectives for discussion of environmental and human health conditions.

Presently, there is some variability in how environmental data are collected, analyzed and interpreted. This may be due to individual interpretations of procedures, individualized techniques used, insufficient or inadequate training, and/or an insufficient or inadequate reevaluation of proper and approved standard operating procedures regarding the collection and analysis of environmental data. This is not intended to mean that there can be only one way to collect and analyze environmental data, but that there must be specific standardized operating procedures adhered to that must result in overall consistency of obtaining these measurements. The bottom line is that all field and laboratory data collection and analysis should be performed in a consistent manner, so that environmental measurements that are generated are of a known, documentable and acceptable quality.

Standard Operating Procedures are available in the Region. However, there can be more than one approved Standard Operating Procedure readily available, and these may differ, they may not be consolidated in one place, and they differ in their format. This may lead to some disparities in the collection and analysis procedures employed. The Standard Operation Procedures need to reviewed,

organized, consolidated, reformatted, and made available for dissemination. All personnel must be reviewing and using the same operating procedures, so that there is a foundation upon which to build consistency in data collection and analysis. The validation and certification of field data collection and analyses are not being performed consistently, at this time. There can be several acceptable procedures available to collect field data that produces reliable results. A means to verify the proficiency of field data collection and analysis procedures should be developed and implemented. A strategy, such as an annual, or bi-annual, field data collection proficiency evaluation should be developed, and implemented.

Region 2 has responsibility under the National Estuary Program for CCMP implementation for the NY/NJ Harbor, Barnegat Bay, San Juan Harbor, the Peconic Estuary and the Long Island Sound. Monitoring is a critical component of EPA's environmental management and protection responsibilities. Region 2 has developed a REMAP (Regional Environmental Monitoring and Assessment Program) to promote obtaining accurate, high quality, "cutting edge"data to drive management decisions concerning public health and the environment in these estuaries. Indicator development under REMAP is ongoing and will continue through 2008.

Through REMAP and other Regional monitoring efforts the Region has been able to: answer questions which focus on the entire spectrum of effects, not just "hot spots"; compare different environmental systems; establish priorities objectively; determine trend assessment on a statistically defensible basis; standardize sampling methodology to ensure comparable data; develop documentation of methods; develop and implement an exemplary QA program; and institutionalize external peer review. Further refinement of these processes will be a focus over the next several years.

The Region will expend considerable effort through 2008 incorporating the latest science and developments in ecological monitoring into the Regional, State, Tribal and local decision-making process, and advancing the science of ecological monitoring as a tool for Regional, State, Tribal and local problem formulation in risk assessments, and measurement of the ecological results of risk management option selection.

The Region will not be disinvesting in any of the national activities to achieve regional interests, and we are on target to meet our contribution toward the agency's 2008 goals.

Strategy Highlights:
Generally follows national program. Specifically, the strategy the Region will use to achieve the goals of this objective consists of

annually reviewing field and laboratory standard operating procedures in order to ensure the validity and accuracy of the measurements being obtained. Field and laboratory personnel will be required to annually certify that they have reviewed the relevant standard operating procedures, and that they are performing their duties in accordance with them. In addition, the validation, and subsequent certification, of the field and laboratory data collection and analysis procedures should include an independent and documented evaluation of the abilities of the individuals to perform their functions. This validation procedure could be conducted by supervisors, team leaders, or personnel from other Regions. Deficiencies in performance would be noted and corrected, before certification is approved.

Quarterly meetings are, and will continue to be, held with our State and Territory counterparts to strengthen partnerships and implement National and Regional policy.

Strategies	**Tools/Programs**
Apply Industrial Ecology to improve PBT analysis	NY/NJ Harbor Industrial Ecology project [DEPP]
Assess environmental conditions of NEPs to support CCMP implementation	REMAP assessment of baseline water and sediment quality in Barnegat Bay [DESA]. Ten year REMAP trend assessment of sediment and water quality in the NY/NJ Harbor [DESA] Baseline assessment of water/sediment quality in San Juan Harbor and Peconic Estuary [DESA] Long Island Sound research program [LISO]
Improve environmental measurements carried out in support of monitoring activities to ensure that data are of known, documented and acceptable quality	Update field and laboratory SOPs to ensure validity/accuracy of measurements [DESA] NELAP Accreditation [DESA] Documented Quality Systems [DESA] Technical/Quality System Assessments [DESA]

Strategies	Tools/Programs
Automate Environmental Data Assessment Capability	GIS analytic tools [OPM]

Goal 5: Compliance & Environmental Stewardship
Objective 5.1: Improve Compliance
Subobjective 5.1.1: Compliance Assistance

Current State/Major Problems to be Addressed:
Compliance assistance is a valuable tool we use to improve the regulated community's compliance with environmental regulations. EPA, Region 2 strategically targets compliance assistance activities where regulated entities are having problems understanding how to comply with regulatory requirements and provide educational tools and other assistance such as workshops and on-site visits to help increase their understanding of regulatory obligations, improve environmental management practices and reduce pollution. Pollution Prevention, implementation of EMSs, and adoption of BMPs are key components of our compliance assistance activities. In addition to the routine compliance assistance currently provided during our investigations and compliance evaluations, during FY 2005 through 2008, the Region will focus our efforts on children's health, auto salvage yards, municipal Department of Public Works, and fleet maintenance facilities.

The costs of childhood diseases of environmental origin are estimated at $54.9 billion annually and are 2.8 % of all healthcare costs. An estimated 4.8 million children under 18 years of age have asthma. About 150,000 children with asthma are hospitalized each year, and 600 die from disease. Children also have special vulnerabilities to certain toxic substances, such as lead. Here at EPA Region 2 we are committed to reducing environmental threats to children both at home and at school through compliance assistance efforts.

The Region has found through inspections that many sectors, including auto salvage yards and fleet maintenance facilities such as bus companies, are not aware of all their responsibilities under the various environmental laws.

Important compliance challenges faced by the auto salvage industry include preventing the release of liquid hazardous materials such as oils and lead-acid battery contents into the soils, groundwater, and surface waters and the release of air conditioning refrigerants such as

chlorofluorocarbons (CFCs) into the atmosphere. Environmental problems at auto salvage yards are similar to those associated with local Department of Public Works (DPW) facilities and fleet maintenance facilities (fluids management, dry wells, storm water, parts cleaners, used oil management, storage and labeling of HW containers, UST.)

Through our lead shot initiative, Region 2 continues to reach out to shooting ranges and shooting sports organizations and, through use of "Best Management Practices for Lead at Outdoor Shooting Ranges", the guidance document produced in Region 2, encourages shooting ranges to develop Environmental Stewardship Plans designed to minimize adverse environmental impacts and foster recycling of lead shot and bullets on a periodic basis dependent upon site-specific conditions. This compliance assistance activity complements the Region's other activities aimed at reducing waste generation & increasing recycling discussed under subobjective 3.1.1.

Strategy Highlights:
EPA Region 2 is committed to reducing environmental threats to children both at home and at school through compliance assistance efforts specifically targeting asbestos, lead paint, lead in drinking water, and pesticides. In these areas, inspectors will help increase the understanding of schools' regulatory obligations, conduct compliance seminars and workshops for high schools, develop tools to increase awareness of environmental regulations by school personnel; and identify, consolidate, compile and prepare guidance which will be disseminated out to targeted schools.

The Region is in the process of finalizing a compliance assistance tool that discusses best management practices for auto salvage yards and will share the finalized manual with yards in the Region followed by compliance seminars to educate the yard owners and operators on the best management practices. Many of the compliance assistance materials previously developed by R2 for the Auto Service and Repair Sector and HW for transportation-related facilities can be easily modified to serve as tools for auto salvage yards and fleet maintenance facilities. Since fleet maintenance facilities are conducting maintenance on their own fleets, rather than working on other people's vehicles, we may find a more receptive audience for BMPs, P2, and voluntary disclosures. With increased enforcement planned for FY 2004, we will also have an audience that will be receptive to our offers of compliance assistance and solicitation of voluntary disclosures.

Region 2 plans to develop some compliance assistance materials (website, multi-media self-audit checklist, seminars, common violations, Best Management Practices (BMPs), pollution prevention resources) for local governments and DPWs and then send out letters encouraging voluntary disclosures and implementation of environmental management systems (EMS) from these facilities.

Much of this information is already available, but many facilities have not yet discovered these resources or taken advantage of them. Additionally, Region 2, through design of Supplemental Environmental Projects being undertaken to partially fulfill the requirements for settlement of enforcement cases resulting from our College/University Initiative, is developing a Best Management Practices manual for high schools that will enable high schools to develop environmental stewardship plans to assist them in ensuring compliance with all environmental programs and to better protect the children in their charge. These compliance assistance materials will be widely distributed through a series of seminars and pilot projects as well as distribution through the internet.

Strategies	**Tools/Programs**
Implement compliance assistance efforts targeted at sectors	Auto Salvage Yards Local Governments and Department(s) of Public Works Fleet Maintenance Facilities Provide compliance assistance and encourage self-audit to healthcare and campus-based organizations (e.g., universities) **see related activities under subobjective 3.1.2**
Protect Sensitive Populations	Coordinated children's health initiatives in targeted geographic areas: ascertain status of testing drinking water for lead in schools, provide compliance assistance, and review compliance with asbestos, pesticides, and residential lead regulations
Marina compliance assistance Initiative	Provide compliance assistance to small business marinas regulated under the SPCC Program **(see related activities under subobjective 3.2.1, "preparing for and responding to accidental and intentional releases emerg. prep./oil spills")**

Goal 5: Compliance & Environmental Stewardship

Objective 5.1: Improve Compliance
National Sub-objective 5.1.2: Compliance Incentives

Current State/Major Problems to be Addressed:
Compliance incentives, voluntary programs and innovative approaches are designed to motivate better environmental compliance and performance by individuals, communities, businesses and industry sectors. The EPA Audit Policy, "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations", has been in effect since 1995. It safeguards human health and the environment by providing incentives for regulated entities to come into compliance with the federal environmental laws and regulations. The policy was designed to provide major incentives for regulated entities that voluntarily discover, promptly disclose, and expeditiously correct noncompliance, rendering formal EPA investigation and enforcement action unnecessary. Voluntary initiatives like EPA's Self-Audit Policy help to increase environmental performance, accountability, and responsibility, and allow EPA to focus enforcement and compliance assurance resources on significant areas of environmental, public health and compliance problems. EPA has a similar, but more flexible policy for small businesses.

Strategy Highlights:
The Region will continue to make the Audit Policy and other compliance incentives available to the regulated community, including reduced penalties for violations, extended time for correction, and potentially fewer or less frequent inspections. EPA Region 2 also encourages owners of multiple facilities to disclose environmental violations because such disclosures encourage these regulated entities to review their operations more comprehensively, providing greater overall benefit to the environment.

During FY 2005 through 2008, we will no longer be aggressively promoting the audit policy to the hospital sector; facilities will still have the opportunity to self-disclose and we will continue to implement our audit agreements with participating facilities. As we start inspecting more hospitals in FY 2004, the Region anticipates an increase in the number of interested hospitals to self-disclose violations. During this period, we will be promoting the audit policy to Local Governments and Department(s) of Public Works, and fleet maintenance facilities, in concert with targeted compliance assistance.

EPA, Region 2 will continue to encourage companies with multiple facilities to take advantage of the Agency's Audit Policy to conduct corporate-wide audits and develop corporate-wide compliance systems.

Strategies	Tools/Programs
Promote self audits/disclosure	Local Governments and Department(s) of Public Works Fleet Maintenance Facilities Continue to process self-disclosures Negotiate “pre-Audit” agreements

Goal 5: Compliance & Environmental Stewardship
Objective 5.1: Improve Compliance
Sub-objective 5.1.3: Monitoring and Enforcement

Current State/Major Problems to be Addressed:

Compliance by the regulated community with environmental laws/regulations through effective monitoring and compliance assessment helps ensure environmental protection. Without compliance, the promulgation of environmental laws and regulations has little impact. Sensitive populations such as children and people of minority and low-income communities may suffer a disproportionate burden of health consequences due to special vulnerabilities, and from exposure to toxic chemicals at home and at work, and are often overlooked by the regulated community. Through EPA Region 2's Children’s Health, Environmental Justice, and Geographic Initiatives, we plan to ensure the protection of the environment and public health of these sensitive populations.

Strategy Highlights:

Region 2 continues to support the national priorities identified by the Office of Enforcement and Compliance Assurance (OECA). The Region has focused on maintaining a viable core program in the non-delegable programs and maintaining oversight of delegated state enforcement programs. We have numerous regional initiatives associated with environmental risks, as well as compliance concerns covering a wide range of enforcement activities. We continue to maximize compliance and deter future non-compliance using various tools such as consent decrees, administrative orders, monetary penalties, notices of violation, and civil referrals. We expect this approach to environmental protection will be a vital component of the Region's enforcement and compliance program for the foreseeable future.

EPA, Region 2 is committed to smart enforcement, which is the use of the most appropriate enforcement or compliance tools to address the most significant problems to achieve the best outcomes. One of the outcomes of smart enforcement is integrated strategies. An integrated strategy includes an up front consideration of what tool - compliance assistance, incentives, monitoring, or enforcement - to use when addressing identified environmental problems. These strategies contain clear measures to evaluate their effectiveness in resolving compliance problems and achieving environmental results.

To address the most significant risks to human health and the environment, including disproportionate burdens on certain populations, we will target inspections, civil investigations, and criminal investigations to achieve the greatest reduction in pollution. In this regard, we and our States will review compliance data, the results of inspections and investigations, and citizen complaints to target those areas, beyond solely major sources, that present high rates of noncompliance and significant risks to human health and the environment.

Compliance monitoring and enforcement determines compliance with applicable laws, regulations, permit conditions, orders and settlement agreements, and also whether or not conditions presenting imminent and substantial endangerment to public health and the environment may exist. In this regard, the Region has two significant examples of work we are doing in RCRA to achieve this particular subobjective: **Luis Munoz Marin International Airport, Carolina, Puerto Rico:** Operation of a 29,000 ft., 50 year old, underground, hydrant-controlled, carbon steel pipeline, situated in a saline environment, for the delivery of aviation jet fuel at this major 1000 acre airport , located close to San Juan, Puerto Rico, has resulted in large scale releases to sensitive ecosystems. This pipeline, which handles between 600,000 and 1,000,000 gallons of fuel daily has a long history of releases which resulted in the issuance of a RCRA Section 7003 Imminent and Substantial Endangerment Order by Region 2 to the Puerto Rico Ports Authority and five other respondents requiring an investigation of the contamination in the subsurface and an assessment of the underground fuel delivery system. Following this investigative phase, an additional Order requiring cleanup will be issued. Region 2 is investigating the fuel delivery operations at many other airports in the Caribbean and throughout the Region to determine whether similar situations exist and if additional actions are necessary.
Municipal Landfills in the US Virgin Islands and Puerto Rico: Region 2, employing a very innovative use of its authority, has issued two RCRA 7003 Imminent and Substantial Endangerment Orders to the two municipal landfills in the USVI, Bovoni and Anguilla. These Orders were issued due to the continuing existence of dangerous conditions at these landfills in order to clean up contamination caused by the illegal disposal of commercial used oil and hazardous waste, and to bring them into compliance with the regulatory criteria for the safe operation of municipal landfills. This process continues according to the schedules contained within the Orders. Additionally, Region 2 has investigated the operations at a number of municipal landfills in Puerto Rico and has discovered many of the same and similar conditions as those found at the landfills in the USVI. We are presently working with the Puerto Rico Environmental Quality Board to bring about positive changes in these landfill operations and are closely monitoring progress to determine whether further use of RCRA 7003 authority is needed.

The inspection program usually consists of pre-inspection surveillance to obtain general site information prior to entering the facility. Facility Inspections (on site) are conducted which may include record reviews, observations, sampling, interviews, etc., and may be single or multimedia, facility or industry sector-based, or have a geographic or ecosystem focus. Investigations are generally more comprehensive than inspections and may be warranted when an inspection or record review suggests the potential for serious, widespread, and/or continuing civil or criminal violations.

Strategies	Tools/Programs
Support National Performance Priorities	Environmental Justice Data Management Smart Enforcement (Wet Weather, NSR/PSD, Address Significant Non Compliance and high priority violations in a timely manner)
Protect Sensitive Populations	Coordinated children's health initiatives in targeted geographic areas: ascertain status of testing drinking water for lead in schools, provide compliance assistance, and review compliance with asbestos, pesticides, and residential lead regulations
Protect the human health and the environment by enforcing the nation's environmental laws • Core Program • State Oversight • Regional Priorities	Compliance Monitoring Enforcement Actions Watch List/ SNAP State Program Reviews
Implement air toxics emission standards	Full and partial Compliance Evaluations (This complements other regional strategies discussed under Subobjective 1.1.2 to reduce risk from Toxic Air pollutants)
Provide oversight and build state capacity to deliver safe drinking water.	Quarterly SNC Process Enforcement of early rule requirements to assure good compliance rates when states obtain authority Data Verifications (This strategy, tools and programs complement those regional activities to achieve subobjective 2.1.1 [water safe to drink])
Require community water systems to meet health-based standards.	PRASA Global Settlement (This strategy, and enforcement activity complement those regional activities to achieve subobjective 2.1.1 [water safe to drink])

Goal 5: Compliance & Environmental Stewardship
Objective 5.2: Pollution Prevention & Innovation
Subobjective: 5.2.1.: by Government and the Public (TRI, green govt, EPP, NEPA)

Current State/Major Problems to be Addressed:
Traditional end-of-pipe technologies are reaching their technological limits in terms of further reducing emissions and environmental impacts. Pollution prevention (P2) can and should be the preferred approach to achieving further reductions yet, while generally cost-effective, P2 is not readily adopted since it is largely a voluntary program. We believe significant opportunities exist in the government and public sectors to engage in more P2 initiatives. Government must serve as a responsible leader in effective P2 implementation to encourage private sector adoption.

Strategy Highlights:
We can assist and encourage the adoption of P2 into the government and public sector through various methods. One approach is to help facilitate the integration of P2 into the core regulatory programs so that P2 opportunities and assistance can be identified under these traditional communication channels. We will create and actively participate in a inter-divisional, cross-media group (Regional P2 Council) which will aggressively evaluate opportunities for promoting P2 in the Region and coordinate the implementation of these initiatives. We will promote P2 through education and outreach programs and we will serve as an example of P2 effectiveness by using our Environmental Management System (EMS) initiative to adopt extensive P2-focused efforts. We will work through the NEPA program to educate and promote other federal agencies on P2 opportunities and options. We will encourage our partner states and tribes to create programs that promote P2 within their jurisdictions. We will encourage broader participation by government entities, particularly our states and tribes, in our P2 grant program to help them build effective P2 programs.

Strategies	Tools/Programs
Integrate P2 into Region 2's activities and core programs	Establish an inter-Divisional Regional Pollution Prevention Council to coordinate and help achieve the pollution prevention goals/objectives/strategies identified under Goal 5.2 and generally promote and foster the adoption of pollution prevention principles across the Region's programs [DEPP, OPM, DECA, DESA] Adopt a P2 Vision Statement for the Region and develop specific P2 actions for each core program [DEPP, OPM, DECA, DESA] Promote P2 educational and training resources through employee awareness training, P2 Week activities and Region 2's P2 web site [DEPP, OPM, DECA, DESA]
Promote P2 in other Federal Agencies	Work with the Region 2 Federal Facility Coordinator to promote P2 opportunities in other Federal Agencies residing within the Region [DEPP and DECA] Work with federal facilities on projects subject to NEPA review and suggest Best Management Practices in correspondence to mitigate significant environmental impacts [DEPP and DECA] Promote voluntary partnership programs such as the Energy Star, Green Lights, ClimateWi$e, Resource Conservation Challenge and Pesticide Environmental Stewardship Programs [OPM, DECA and DEPP] Promote P2 as part of sector- based compliance assistance activities
Build state and Indian Nation capacity to deliver P2 programs	Continue to participate in the Northeast Waste Management Officials' Association P2 Roundtable meetings [DEPP] Integrate P2 into state regulatory programs through active involvement in state PPA/PPG negotiations [DEPP] Continue to administer the Pollution Prevention Incentives for States (PPIS) and P2 support funds [DEPP] Encourage State participation in the P2 grant program [DEPP and DECA] Encourage Indian Nations environmental programs to apply for P2 project grants (PPIS) [DEPP] Continue to work with State environmental assistance networks [DECA]

Strategies	Tools/Programs
Increase public education	Enhance Region 2's Pollution Prevention web page [OPM and DEPP] Work with Region 2's Public Affairs Division (PAD) to promote P2 outreach/education activities [PAD, DEPP, DECA, OPM and DESA]
Promote EMS	Seek opportunities to provide training for public and private sector on how to develop and implement an EMS program [OPM, DEPP, DECA and DESA] Continue to participate in the Regional EMS workgroup to develop and implement an EMS for 290 Broadway and the Edison Facility [OPM, DEPP and DECA]
Increase early & regular communication among federal agencies on NEPA compliance	Continue participation and promotion of Federal NEPA roundtable to discuss project and non-project specific NEPA issues [OPM and DEPP] Amend the NEPAssist web-based application to promote the use of Best Management Practices to mitigate significant environmental impacts [DEPP]

Goal 5: Compliance & Environmental Stewardship
Objective 5.2: Pollution Prevention & Innovation
Subobjective: 5.2.2 : by industry (TRI, PP)

Current State/Major Problems to be Addressed:
Traditional end-of-pipe technologies are reaching their technological limits in terms of further reducing emissions and environmental impacts. Pollution prevention (P2) can and should be the preferred approach to achieving further reductions yet, while generally cost-effective, P2 is not readily adopted since it is largely a voluntary program. We believe significant opportunities exist in the private sector to adopt and engage in more P2 initiatives.

Strategy Highlights:
The Region will strive to better integrate P2 into its core regulatory programs to help encourage industry to investigate and adopt P2 practices as an alternative to the traditional end-of-pipe technologies. Coordinating through the Region's P2 Council will enable all of our programs to identify opportunities for new initiatives. We will use our P2 grant resources to target research and other efforts that focus on P2 in priority sectors and for priority PBTs. We will continue to promote industry's participation in voluntary partnerships, such as Green Lights and WasteWise.

The Region will continue to promote the use of the Risk Screening Environmental Indicator by facilities so that facilities can identify the TRI chemicals that cause high risk in the community where the facility is located. This provides facilities with knowledge on where to look for pollution prevention opportunities through chemical substitution.

Strategies	Tools/Programs
Integrate P2 into Region 2's activities and core programs	Establish an inter-Divisional Regional Pollution Prevention Council to coordinate and help achieve the pollution prevention goals/objectives/strategies identified under Goal 5.2 and generally promote and foster the adoption of pollution prevention principles across the Region's programs [DEPP, OPM, DECA and DESA] Adopt a P2 Vision Statement for the Region and develop specific P2 actions for each core program [DEPP, OPM, DECA and DESA] Promote P2 educational and training resources through employee awareness training, P2 Week activities and Region 2's P2 web site [DEPP, OPM, DECA and DESA]

Strategies	Tools/Programs
Provide businesses with the ability to adopt more efficient and sustainable practices	Through the Regional P2 Council, coordinate with programs to identify and target PBT chemicals and sectors in all Region 2 media programs of concern [DEPP, DECA and DESA] Enhance Region 2's Pollution Prevention web page [DEPP, OPM, DECA and DESA] Promote voluntary partnership programs such as the Energy Star, Green Lights, ClimateWi$e, Resource Conservation Challenge and Pesticide Environmental Stewardship Programs [DEPP, OPM, DECA and DESA] Encourage enforcement staff to provide P2 information and material to facilities during site inspection/visits [DECA] Provide P2 grants to eligible organizations representative of targeted sector programs [DEPP and DECA] Through the Regional Pollution Prevention Council identify opportunities to promote and foster the adoption of pollution prevention principles across the business industries [DEPP, OPM, DECA and DESA] Outreach to industries to promote participation in the Performance Track [DEPP]

Goal 5: Compliance & Environmental Stewardship
Objective 5.2: Pollution Prevention & Innovation
Subobjective: 5.2.3 : business & community innovation (PT, sector strategy)

Current State/Major Problems to be Addressed:
From 2001-2003, Performance Track (PT) membership grew 35% (from 34 members to 45 members). Region 2's PT members collectively have reduced water use by 100 million gallons and reduced hazardous waste generation by 10,000 tons in 2001. Other notable improvements include reduced emissions of greenhouse gases and reduced energy usage.

Strategy Highlight:
Region will continue to be a leader in promoting and enrolling Performance Track members.

Strategies	Tools/Programs
Increase participation in Performance Track (see 5.2.2 for additional strategy)	Identify opportunities for Divisions to participate in PT and Link PT outreach efforts to other regional programs (e.g., EMS, NY/NJ HEP, Corporate Wetlands Restoration Program) [DEPP] Outreach to sector-based trade organizations and regulated facilities [DEPP] Enhance partnerships with Region 2 states [DEPP] Environmental successes by PT members widely shared [DEPP] Encourage Federal facilities to join PT [DECA,DEPP]

Goal 5: Compliance & Environmental Stewardship
Objective 5.2: Pollution Prevention & Innovation
Subobjective: 5.2.4: Env. Pol. Innov. (SIG/ERP)

Current State/Major Problems to be Addressed:
Pollution prevention, being largely a voluntary program, requires the use of innovative approaches to help foster its adoption. The Region currently has an Innovations Exchange Network that can be used to promote innovative programs in the P2 area.

Strategy Highlights:
We will continue to have P2 team representation on the Region's Innovations Exchange Network to encourage P2 initiatives. We will continue to promote the membership in voluntary programs and facilitate the use of more green building design and construction in the Region 2 area, particularly in recognition of such opportunities within the lower Manhattan rebuilding effort.

Strategies	Tools/Programs
Participate in Region's Innovative Exchange Network	SEPs and Sector-based compliance assistance initiative (e.g., hospitals) [DECA] Green meeting materials and guidance [OPM]
Promote Voluntary Partnership Program	Promote voluntary partnership programs such as the Energy Star, ClimateWi$e, Green Lights, and Pesticide Environmental Stewardship Program [DEPP, OPM, DECA, DESA]
Promote Green Building Construction in Region 2	Develop outreach materials using ORD research (RARE proposal) to encourage and facilitate Green Building design and construction [OPM and DEPP]

Goal 5: Compliance & Environmental Stewardship
Objective 5.3: Build Tribal Capacity (enterprise architecture, State of the Tribes report delegations, monitoring &assessment, multi-media approaches)

Current State /Major Problems to be Addressed:
The seven federally-recognized Indian Nations in the Region 2 area are located within the external boundaries of New York State. The estimated Indian Nation population is according to the Bureau of Indian Affairs approximately 17,000, with land holdings of approximately 106,000 acres (we are aware of purchases of land and pending land claims which may affect these figures).

Region 2 has taken steps to continue to implement the EPA Indian Policy and will focus on assisting the Indian nations with the development of their respective environmental program capabilities. In this regard, the Regional Administrator targeted over $100,000 of RA priority/discretionary funds to increase by approximately 15% the General Assistance funds allocated to the Region. Further, the Region has supported SEE Circuit Riders who assist the environmental program capacity building by the Indian nations.

The Region has begun to enter information into the EPA Tribal Enterprise Architecture (formerly known as the baseline assessment); this information will be useful to help set priorities. With regard to the development of an annual status of the tribal environment report, we note that Region 2 participated in the EPA production of this report in past years; in addition, we have, on an annual basis through the Region 2 Indian Workgroup, updated information on the status and on issue/highlights in preparation for the Region's annual Indian Nation leaders meeting. These meetings (the 8th annual meeting was held on Nov. 17-20 2003), have helped enhance government-to-government relationships between the Region and the Indian Nations. In addition, the Region continues to discuss with the Indian Nations the development of consultation agreements (e.g., one with the St. Regis Mohawk Tribe was signed in November 2003), and agreements with regard to the National Historic Preservation Act. The Region anticipates continuing to produce a status of the issues and the environmental program development by Indian Nations on an annual basis.

Strategy Highlights:
With regard to implementation of programs, the Region is actively working with those Indian nations that have expressed an interest in coming in for program delegation and program authorization. For example, following the approval of the St Regis Mohawk Tribe application, the Region continues to coordinate with the St Regis Mohawk Tribe with regard to its development of Water Quality Standards. Region 2 has, primarily through the General Assistance and other program and project grants, coordinated with the Indian nations and the Indian nations' grant applicants to encourage environmental monitoring and assessment. In a related matter, the development of Quality Assurance Management Plans continues to be an essential part of Indian nation environmental capacity building; QA training has been provided.

Similarly, through the General Assistance program the Region has and continues to encourage development of environmental programs that dovetail with the Indian nations' cultural and traditional practices. In this regard, the St Regis Mohawk Tribe's Performance Partnership Agreement (PPA) is based on the culturally significant traditional Thanksgiving Address. The PPA also incorporates EPA

strategic planning as well as GPRA goals and objectives; the agreement is cross-media and reflects holistic program integration. The PPA has been instrumental in building tribal values into the St Regis Mohawk Tribe's enforcement program, has helped support the Tribe's development of its Geographic Information System capabilities and steps towards overall computerization of its systems. The Indian Nations have received information on the regulatory decision making process as well as advance information on conferences, Region 2 actions that may affect them, and training opportunities. The Region continues to consult with the Indian nations. For example, the Region has worked with the Onondaga Nation with regard to the Onondaga Lake Partnership for Onondaga Creek and consulted with the Tuscarora Nation regarding relicensing of the Niagara River Project and environmental impacts.

The strategies listed in the table below (marked by "") have been identified as having pollution prevention opportunities. As discussed in Chapter 3 (Cross Cutters/Enabling Strategies), this highlights those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments.*

Strategies	**Tools/Programs**
Gather quality information to assess environmental conditions & develop data systems	Aquifer & aerial maps & GIS capability [OPM] Tribal Baseline Assessment Project [DEPP] General Assistance [DEPP] Provide support to the Indian Nations to better define the environmental issues on their lands and on land claims [DECA]
Enhance government to government communications	Annual Indian Nation Leadership meetings with Region 2 senior managers [DEPP] Consultation Agreements [DEPP] National Historic Preservation Act [DEPP] Confirmation of consultation in Project Officer memos [all] Ensure that regional staff is trained in working effectively with Indian nation governments [DEPP]

Strategies	Tools/Programs
*Build capacity to implement environmental programs	Circuit Rider [DEPP] Indian Nation/EPA Agreements (TEAs) [DEPP] Haudenosaunee Environmental Restoration Strategy [DEPP] General Assistance Program (GAP) [DEPP] Region 2 Indian Workgroup [DEPP] Training in monitoring, QA, and data management [DESA] Media specific Program and Project grants [DEPP, DECA,ERRD]
Increase joint strategic planning capabilities	Performance Partnership Agreements [DEPP] General Assistance funding [DEPP] Individual media MOAs between EPA and Indian Nations [DEPP]
Incorporate culturally-based environmental protection into Region 2 programs	Tribal Science Council's Health & Well Being Assessment [DEPP] Cultural Ecosystem Stories [DEPP] General Assistance (GA) [DEPP] Performance Partnership Agreements
Ensure regulatory decision making process includes Indian Nation consultation	Regulatory review [DEPP] Consultation Agreements [DEPP]

Goal 5: Compliance & Environmental Stewardship
Objective 5.4: Science & Research
Subobjective: 5.4.1: Strengthening Science

Current State/Major Problems to be Addressed:
Presently, there is some variability in how environmental data are collected, analyzed and interpreted. This may be due to individual interpretations of procedures, individualized techniques used, insufficient or inadequate training, and/or an insufficient or inadequate reevaluation of proper and approved standard operating procedures regarding the collection and analysis of environmental data. This is not intended to mean that there can be only one way to collect and analyze environmental data, but that there must be specific standardized operating procedures adhered to that must result in overall consistency of obtaining these measurements. The bottom line is that all field and laboratory data collection and analysis should be performed in a consistent manner, so that environmental measurements that are generated are of a known, documentable and acceptable quality.

Standard Operating Procedures are available in the Region. However, there can be more than one approved Standard Operating Procedure readily available, and these may differ, they may not be consolidated in one place, and they differ in their format. This may

lead to some disparities in the collection and analysis procedures employed. The Standard Operation Procedures need to reviewed, organized, consolidated, reformatted, and made available for dissemination. All personnel must be reviewing and using the same operating procedures, so that there is a foundation upon which to build consistency in data collection and analysis. The validation and certification of field data collection and analyses are not being performed consistently, at this time. There can be several acceptable procedures available to collect field data that produces reliable results. A means to verify the proficiency of field data collection and analysis procedures should be developed and implemented. A strategy, such as an annual, or bi-annual, field data collection proficiency evaluation should be developed, and implemented.

It is not likely that the Region will need to divest entirely from any national activities, but through necessary short and middle-term prioritization, may delay implementation or completion of some. Currently, the Region is on target to meet its contribution toward the Agency's 2008 goal.

Strategy Highlights:
The strategy the Region will use to achieve the goals of this objective consist of annually reviewing field and laboratory standard operating procedures in order to ensure the validity and accuracy of the measurements being obtained. Field and laboratory personnel will be required to annually certify that they have reviewed the relevant standard operating procedures, and that they are performing their duties in accordance with them. In addition, the validation, and subsequent certification, of the field and laboratory data collection and analysis procedures should include an independent and documented evaluation of the abilities of the individuals to perform their functions. This validation procedure could be conducted by supervisors, team leaders, or personnel from other Regions. Deficiencies in performance would be noted and corrected, before certification is approved.

Strategies	Tools/Programs
Continually strive to improve environmental measurements and ensure that data are of known, documented and acceptable quality	Review/update field and laboratory Standard Operating Procedures to ensure validity and accuracy of measurements [DESA]. NELAP accreditation [DESA] Documented Quality Systems [DESA] Technical/Quality System Assessments [DESA] Review and consolidate Regional SOP's [DESA] Annual self-certification [DESA] Independent validation and certification [DESA]

Strategies	Tools/Programs
Improve the technical enforceability of environmental measurement techniques	Develop and implement a feedback mechanism to periodically assess the effectiveness of environmental measurement data [DESA]. Prioritized feedback mechanism for assessing regulatory framework [DESA]. Peer reviewed publications on innovative field and laboratory approaches [DESA].
Improve validity and accuracy of data submitted to EPA/States by facilities (and their laboratories) that perform self-monitoring	Perform audits of data generated by facilities reporting to EPA/States [DESA] Evaluate methods of collecting, preserving and analyzing data [DESA].
Gather data on emissions and reductions associated with targeted industries	Oversight of targeted emission testing and monitoring results [DESA].

Chapter 3 Cross cutting/Enabling strategies

A number of Region 2's efforts do not discretely fit into the media programs but rather are cross-cutting (or enabling) strategies that have enhanced our ability to accomplish our objectives. These strategies will likely be a large component of our approach to managing the environment in the future and to addressing issues that are increasingly complicated involving multiple media.

This chapter highlights the cross cutting/enabling strategies that are of significance to Region 2: Homeland Security, Partnerships, Information, Innovation, Human Capital, Science, Use of Environmental Management Systems(EMS), and Pollution Prevention. For each of the cross-cutting strategies, we have described the projected accomplishments over the next several years and how the strategy will help the Region meet the five agency goals.

1. Homeland Security

Homeland security efforts will include and take advantage of the work already being accomplished in support of the National Contingency Plan (NCP), National Response System (NRS), the agency's National Approach to Response (NAR), Core Emergency Response program elements (Core ER), various environmental compliance programs, and those plans and response mechanisms external to the agency that are currently in place, such as the Federal Response Plan (FRP), the Federal Radiological Emergency Response Plan (FRERP), and the draft National Response Plan (NRP). All efforts will support the agency's primary mission to protect human health and the environment. Since the effort to enhance and support homeland security initiatives are significantly based on enhancing existing agency programs and response structures already in place, this program achieves and supports all five of the Agencies goals. The attacks of September 11 in New York have made this an issue of particular significance and resonance to Region 2 and the states of New York and New Jersey. It is also a very important issue to our Caribbean partner agencies (see Chapter 5). The USVI indicated a special challenge posed by its relative isolation, and its effect on response time.

Over the next five years, EPA Region 2's homeland security efforts will be aligned with the national program, which focuses on four areas of responsibility: Critical infrastructure protection; Preparedness, response, and recovery; Communication and information management; and Protection of EPA personnel and infrastructure. Key aspects of each of these areas of responsibility are discussed in the Agency's strategic Plan, and in Chapter 2 of this Regional plan.

With respect to the goal of protecting EPA personnel and infrastructure, the Region has taken a number of critical steps to build the infrastructure for its Regional Response Center, which is located at our Edison, New Jersey facility. We have built-out a temporary RRC, which is being replaced by a larger permanent RRC (construction in 2004/2005). Additionally, we have established a Regional Continuity of Operations (COOP) plan at each of our three main locations (New York, New Jersey and Puerto Rico), which includes ensuring access to Agency datasystems through creation of redundant systems and stand-alone servers at each location. We have negotiated with other regions and agencies to identify backup locations where key regional personnel would meet and operate in the event of a major crisis. We also have developed a unique regional database, the Employee Contact Information System (ECIS) that identifies key information for each Region 2 employee, including skills and expertise that could be useful in a crisis; each regional senior manager has access to this information via Region 2's data system as well as a diskette with the ECIS database that they can use in the event of a crisis involving reconvening at a remote location. We have also conducted COOP training at each of our regional offices, and have stocked emergency equipment and "fly away" kits for use if needed. These efforts will continue and be strengthened over the next several years – protection

of our employees and infrastructure is among the region's highest priorities.

2. Partnerships

Chapter 5 contains a detailed discussion of our partnerships with the States of New York and New Jersey, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and our seven Indian Nations. In addition to these important working relationships, Region 2 engages in significant collaborative efforts with other federal agencies, local governments, non-governmental organizations (NGOs), the regulated community and other entities. Collaborative efforts between the Region and various partners have enabled us to achieve environmental results in protecting air, water, and land resources. Several key examples are discussed below.

Goal 1- Clean Air and Global Climate Change: As noted earlier, children's health is a particular focus of our activities to achieve Goal 1 **(see related discussion in Chapter 2 objective 1.2- healthier indoor air)**. Towards this end, the Region has been an active participant in the efforts of the Pediatric/Adult Asthma Coalition (PAC) of New Jersey serving as a member of the steering committee and various issue committees (including schools and environment). PAC is a statewide coalition comprised of organizations across NJ representing all sides of the asthma issue. The Coalition has the state lead on asthma strategic planning and implementation issues to address asthma in the home, in schools, through medical providers, the insurance industry, and through supporting statewide policy initiatives.

We are also actively working with a number of organizations in Puerto Rico to address the Commonwealth's high incidence of asthma. Proyecto AIRE is a collaborative effort between EPA Region 2, The University of Puerto Rico College of Allied Health Programs, Metropolitan University, the PR Department of Health, and Colores de Asthma, the asthma coalition. Proyecto AIRE is designed to educate asthmatic children and their parents about proper disease management and eliminating environmental triggers in the home and school setting. Although only three years old, this partnership has already resulted in the training of 100 asthma outreach educators who, in turn, have provided information to the communities to educate asthmatics about their disease and its proper management.

Goal 2- Clean & Safe Water: Region 2's collaboration with state and local entities has been highly effective in protecting the water supply for the 9 million residents of New York City and parts of Westchester County who use between 1.2 and 1.3 billion gallons of water a day **(see related discussion in Chapter 2 subobjective 2.1.1)** . Specifically, EPA Region 2 - working as part of a team that includes New York City, New York State, local watershed communities and counties, and a coalition of environmentalists- helped develop a plan outlining measures to protect the upstate watersheds draining into the Catskill and Delaware reservoirs. The plan regulates land-use in sensitive areas, calls for acquiring particularly sensitive land, outlines water quality testing procedures, and supports upstate/downstate partnership programs. These actions have enabled New York City to continue protecting its drinking water by preventing pollution at the source in these two watersheds rather than building a $4-6 billion filtration plant.

Region 2 partners with the U.S. Department of Agriculture (USDA) Cooperative State Research, Education and Extension Service, Regional Water Quality Program. Consistent with our approach discussed in **Chapter 2 subobjective 2.2.1**, this collaborative effort facilitates working relationships between USDA, EPA, the Land Grant Universities and other federal and state agencies, to improve water quality programming. Regional projects include: onsite wastewater treatment system management; nutrient trading and animal waste management. This partnership with USDA includes an EPA Region 2 / Cooperative Extension Liaison, who facilitates working relationships with

the four Land Grant Universities serving Region 2 on a wide array of environmental issues, and who coordinates the USDA Regional Water Quality Program.

Goal 4- Healthy Communities and Ecosystems:

The Long Island Sound Study (LISS) is a multi-party initiative under Goal 4 **(see discussion concerning the National Estuary Program in Chapter 2 subobjective 4.3.1)** that involves EPA (Regions 1&2), researchers, user groups and other concerned organizations and individuals, working together to protect and improve the health of the Long Island Sound by implementing the Sound's Comprehensive Conservation and Management Plan. Previously, the Long Island Sound experienced excessive nitrogen loads from the 107 sewage treatment plants discharging into the Sound or its watershed, as well as from non-point sources such as runoff from over-fertilized lawns and farms. Through the work of the LISS program, nitrogen loading to the Sound has been reduced by more than half of the targeted 58.5% (Dec. 2002). The maximum area and duration of severe hypoxia has been carefully monitored, and appears to have declined in recent years. The LISS partners place a great deal of effort into public outreach, to ensure that citizens in the affected communities understand the importance of a healthy Sound. For example, each year the LISS publishes a report (named *Sound Health*) which is provided as an insert to the Sunday editions of major newspapers throughout the Sound watershed. This year 250,000 copies were circulated in this manner; and an additional 15,000 copies were printed to meet the demand from school teachers throughout the area.

Through the Niagara River Toxics Management Plan (NRTMP) Region 2 has achieved some positive environmental results in the clean up and reuse of contaminated land **(see Chapter 2 subobjective 4.3.3 for additional narrative, strategies, tools and programs on this topic)**. The NRTMP is a binational, multi-agency effort involving EPA, the N.Y. State Department of Environmental Conservation (NYSDEC), Environment Canada, and Ontario's Ministry of the Environment to cooperate in a joint investigation of toxics entering the River. A top priority at the outset of the NRTMP was the remediation of the area's hazardous waste sites. In the late 1980s EPA and NYS DEC prioritized for remediation 26 hazardous waste sites that were estimated to contribute 99% of the toxic loading from all hazardous waste sites on the U.S. side of the Niagara River. By June of 2003, EPA and NYSDEC remediation was complete at 18 of the 26 priority waste sites, with remediation underway at another 5 sites. These remediation efforts are estimated to have reduced the loadings of contamination entering the river from U.S. sites by 93%, or a reduction in loading from almost 700 lbs/day to less than 50 lbs/day.

The Region will continue to participate in collaborative efforts such as those noted above, to better achieve environmental results, with a focus on areas where our resources can be most effectively leveraged.

3. Information

There is a need to provide accurate, timely information to a broad spectrum of people, starting with EPA managers and staff, in a useful and usable format, that can show everything from environmental trends over a long period of time in a wide geographic area to detailed environmental conditions at a particular location.

Region 2's goal is to integrate the data from program systems, supplemented with specific state and local analytical data, and to provide managers and staff with a set of integrated tools that easily access these data. Our strategy in achieving this goal is to provide a computerized analytical framework in which to assess and manage our environmental programs.

The Region needs to enable and require its managers and staff to use computers and

computerized techniques, including Geographic Information Systems. A focus on the use of timely and accurate information to improve decision making will be better integrated into the on-going operational components of program management. This framework has several objectives:

- enable the Region to communicate existing environmental conditions, trends, risks, etc. to all its stakeholders;

- improve the means by which this information is communicated, using computerized web-based and graphic display tools, thereby increasing its timeliness, accuracy and understandability;

- automate, to the extent practical, the state of the environment report, making it a Aliving@, web-based assessment tool that can be accessed by the public;

- provide the framework upon which EPA managers can assess the effectiveness of their programs on a near real-time basis, showing long-term trends and existing environmental conditions, upon which programmatic and resource based decisions can be made;

- provide the same set of analytical tools and data, at a different scale, for day-to-day program management; and

- provide the necessary IT infrastructure to enable program managers and staff to fully utilize computerized analytical tools.

The region will prioritize its funding decisions to ensure that regional staff are provided with the necessary up-to-date computerized tools, including hardware and software, to make full use of the computerized analytical capacity. Decisions regarding Agency information management can have an impact on EPA employees; state, Indian Nation and local partners; and the regulated community. EPA employees rely on the Agency=s information management systems and resources to achieve their programmatic goals and will need to rely on information technology to achieve its mission.

4. Innovations

As part of the Region's commitment to Innovations, a regional workgroup, the Innovations Exchange Network (IEN), was formed in 2001. This cross-divisional, voluntary group is striving to facilitate the development of innovative approaches that address pressing regional environmental problems. The group is interested in innovations that cut across the spectrum of EPA's programs, especially those that support the four goals of the Agency-Wide Innovations Strategy:

- Diversify environmental protection tools and approaches
- Foster a more innovative culture
- Strengthen State and Tribal Partnerships
- Focus on priority issues: smog, greenhouse gases, water quality and water infrastructure

Recently, this group has coordinated closely with the Region’s Organizational Change Workgroup, helping operationalize one of their four goals, to “create an environment that encourages a more innovative, empowered and proactive spirit in all we do.” The desired result is a Region in which management recognizes that taking reasonable risk is necessary for developing innovative responses to new challenges and current tasks, and where employees anticipate and respond to problems with new ideas and methods.

The IEN is currently working to identify the factors and conditions that promote and inhibit innovation and calculated risk-taking in the Region. This work will assist the group's efforts to facilitate the creation and implementation of innovative approaches to a targeted set of environmental challenges and administrative processes.

Over the next five years, the IEN intends to continually work to increase management and staff awareness of and access to innovative approaches and creative problem-solving techniques. These efforts will potentially contribute toward the Region's achievements in all five Agency goals as we discover and implement solutions to improve the way we do business.

5. Human Capital

Achieving the goals outlined in the Agency=s five-year Strategic Plan requires an effective human capital strategy that identifies current and prospective workforce competencies, aligns training and employee development with the Agency=s goals, and expands upon successful programs, partnerships and technologies.

The Region already has a foundation to transform its current workforce. For example, the Region has created an Essential Training Curricula to prioritize core and discretionary training needs for its technical, administrative and professional staffs. In addition, the Region has implemented a mentoring program to foster employee career development and management, develop leadership skills and provide perspectives on the organizational culture. To attract and recruit individuals with high potential, Region 2 utilizes the full variety of Federal appointing authorities, including the Presidential Management Intern and EPA Internship programs and the Federal Career Internship Program. Highlighting the importance of human capital as a shared responsibility, Region 2=s cross-divisional Organizational Change workgroup has started to implement some of the 36 action items intended to achieve four strategic goals:

- improve communication;
- increase cross-office collaboration;
- promote innovation and;
- establish a succession management plan.

Guided by the Agency=s Human Capital Strategy, EPA Region 2 will strengthen its current efforts by re-examining and refining these tools to reflect the relationship between employee development and meeting the Agency=s Strategic Plan. Using the Agency=s National Workforce Pilot Survey and its projected rates of retirement, EPA Region 2 will identify and develop strategies to recruit individuals for prospective mission-critical occupations, skills and competencies. To prepare employees for future leadership positions, the Human Resources Branch will work with the Organizational Change Workgroup to implement the senior management=s recommendations for a succession management plan. To reach the broadest audience, the Region will identify and promote distance learning and e-learning initiatives where possible.

6. Science

Region 2, along with its state and Indian Nation partners, relies on scientifically defensible data and models to evaluate risk, develop and defend protective standards, anticipate future health and environmental threats, and identify and enforce solutions. Our Division of Environmental Science and Assessment (DESA), with its multi-disciplinary staff of chemists, biologists, engineers, and others,

serves as a primary provider of scientific and technical expertise for the Region, states and tribes. In addition, there are numerous scientific and technical experts in other divisions to ensure that program decisions are based on sound science and research.

Region 2 has been pursuing the design and construction of a new regional laboratory since the early 1990's. More recently, since the 9/11 attacks, a compelling need has developed for the region to handle samples involving chemical, biological and radiological agents, in conjunction with Homeland Security activities; this need can be met only by constructing a new laboratory facility. Securing a new, state-of-the-art laboratory will be a major focus of attention over the next several years, and the Region works with OCFO and OARM to obtain the budget authority needed for design and construction of a new lab at Edison.

The Region will continue efforts to expand and improve existing state, tribal and local capacity to identify baseline community and ecosystem health conditions and trends in priority geographic areas. This will include continued participation in ORD's Regional Monitoring and Assessment Program (REMAP) and using science to assess environmental vulnerabilities through the use of other ORD tools such as the Regional Vulnerability Assessments (ReVA).

The Region recognizes that many of its pressing environmental problems cross media program boundaries and are not always independent, isolated issues. Pressing environmental problems are not always chemical-specific and can involve low concentrations of chemical mixtures with other stressors. Consequently, the Region will continue to facilitate community chemical-risk health and ecological risk assessments, focusing on cumulative risk assessments of chemically- impacted communities/ecosystems, such as EJ areas and sensitive populations (children, women of childbearing age, the elderly, and others at greatest risk).

By conducting laboratory evaluations and investigations, data validations, quality assurance (QA) management and project plan reviews, managing regional QA programs and analytical services/support contracts, we will continue to assure that environmental data collected by EPA is of acceptable quality to make sound environmental decisions. We will also assure that each state and tribal organization receiving EPA funds has an acceptable a quality management plan (QMP) in place.

The Region will continue to offer environmental monitoring and technical assistance to states, tribes, local governments and other federal agencies, and will help build state, tribal and local government capacity through training workshops, seminars and cooperative studies. Region 2 will remain a key participant in EPA=s Tribal Science Council, which works to ensure EPA understanding of Tribal science needs and Tribal access to EPA science.

Region 2 will also continue to be a key participant in the Agency's Forum on Environmental Measurements (FEM) which ensures that methodologies issued by the Agency are suitable for their intended purposes, that Agency data are scientifically and legally defensible, and that environmental monitoring is done in the most cost effective manner.

The Region will support the efforts of the National Environmental Laboratory Accreditation Conference (NELAC), a voluntary association of State and Federal Agencies and private organizations formed to promote mutually acceptable performance standards for the inspection and operation of environmental laboratories. We will also participate in the National Environmental Laboratory Accreditation Program (NELAP) efforts at implementing the NELAC standards. Additionally, the Region will assist in improving the credibility and acceptability of industry-submitted data to regulatory agencies and will promote the establishment of a uniform set of standards for the production of environmental data by states, agencies and programs. We will also participate in the

NELAP Standards Gap Analysis which will be performed by an independent third party. Additionally, the Region will continue to replace outdated regional laboratory equipment to increase effectiveness in investigation, monitoring, and analysis and maintain state-of-the-art capabilities.

Region 2 will continue to participate in partnership opportunities with ORD and other National Program Offices to use the best science and research for Regional decisions. These efforts include ORD=s Regional Applied Research Effort (RARE) program, Regional Methods Initiative (RMI) and REMAP. The Region will continue to use its Hazardous Substance Technical Liaison (an ORD employee assigned to the Region) and its Regional Scientist Liaison to ORD to foster sound science and needed research in Region 2.

Lastly, Region 2 has a multi-divisional Regional Science Council (RSC) that performs several functions, including identifying science topics that cross divisional boundaries, providing advice on emerging science policy issues, communicating science information, and overseeing the Science Inventory/Peer Review program. Region 2 also is active in the Council on Regulatory Environmental Modeling (CREM) and the EPA Science Policy Council and its Steering Committee.

7. Use of Environmental Management Systems

In response to the Agency's Greening the Government Initiative, EPA Region 2 is in the process of developing and implementing Environmental Management Systems (EMS) for its Regional Office in Manhattan and for the Edison Facility. Both of the Region's EMSs strive to improve environmental performance and to reduce environmental impacts from Regional activities. Initial significant aspects identified at both locations include Energy Consumption, Paper Consumption, Waste Generation and Fuel Consumption associated with daily Regional activities.

The Region's EMSs will also incorporate activities and aspects to promote elements of green buildings, green energy and clean fuels. Over the next five years, environmental aspects and corresponding objectives and targets within the EMSs will explore such areas as the use of alternative fuels in the Regional Fleet, coordination with EPA voluntary programs, opportunities to strengthen pollution prevention and strengthening environmental stewardship among Regional employees. As goals are met, additional objectives and targets will be defined to ensure continual improvements and increased environmental performance. Agency goals will be considered throughout the impact identification process.

Externally, EMSs are being promoted by the Region as a tool to help organizations improve compliance, pollution prevention, and other measures of environmental performance. Sectors where EMSs have been promoted by the Region include Hospitals and Federal Facilities; we are also including EMSs as part of settlement agreements (see Chapter 2, Goal 5 discussion for more information).

8. Pollution Prevention

The Pollution Prevention Act establishes the national policy that pollution should be prevented or reduced at the source whenever feasible. Region 2 recognizes pollution prevention as an important multi-media and overarching goal and endorses the philosophy that pollution prevention should always be considered as the first choice in selecting a waste management strategy. To that end, Region 2 will endeavor to incorporate the pollution prevention ethic in all program areas.

Relationship to Achievement of the Region's Strategic Plan Goals:
The strategic plan sets strategic targets for government and businesses to reduce the production of

wastes. Many programs in Region 2 already use, or have the opportunity to use, pollution prevention as the tool of choice in such efforts and thus contribute to the overarching goals of the pollution prevention program. In recognition of these multi-program contributions, these programs' strategies have been identified (highlighted by an "*") within this Plan as having pollution prevention opportunities. This will highlight those areas where the Region's program offices can focus their current and future regulatory, compliance assistance, technical assistance, and voluntary initiatives towards supporting the overarching P2 commitments. Utilizing this cross-media strategy will lead to longer term benefits and improvements in environmental performance in areas in which we do not have regulatory authority but which need to be addressed if we are to achieve clearer air, purer water, and better protected land. It will offer the Region the opportunity to commit to activities, goals, and specific targets that will foster and support activities from all programs, to achieve, though source reduction and pollution prevention, overall environmental strategic targets.

Activities that will be Conducted and Results to be Achieved:
The Region will establish an inter-Divisional Regional Pollution Prevention Council to coordinate and help achieve the pollution prevention goals/objectives/strategies identified under Goal 5.2 and generally promote and foster the adoption of pollution prevention principles across the Region's programs.

Chapter 4: Accountability

There are two inter-related sets of processes for measuring performance and ensuring accountability. One set of processes deals with our State, Tribal and local partners. For New Jersey and the Saint Regis Mohawk Tribe (SRMT) the National Environmental Performance System (NEPPS) process is used almost exclusively to negotiate outputs, outcomes and to measure and evaluate performance for all aspects of our relations. New Jersey and the SRMT have multi-year agreements. Most other program activities, involving EPA, in New York, Puerto Rico and the Virgin Islands are managed through yearly assistance agreements. Agencies develop annual workplans based on their needs, EPA program guidance, our MOAs with HQ, and any MOUs we have with the individual agencies. Progress reports are reviewed and necessary follow up actions are discussed during quarterly, semi annual and/or annual meetings (the frequency of meetings varies with the grantee and program).

In addition to our coordination through NEPPS or assistance agreements, quarterly meetings between the State environmental Commissioners and the Region 2 Administrator and senior management represent an ongoing opportunity to discuss progress toward achievement of environmental goals. Similar to the meetings between the Region and its states, the Region holds an annual meeting with the Indian Nations to better coordinate our efforts and ensure accountability. Region 2 also utilizes a number of other processes to ensure accountability in state, local and other programs.

Air -The Region has developed Memoranda of Understanding (MOUs) with state partners and, in some cases, municipal and private partners to achieve air emission reductions. For example, Region 2 has signed an MOU with the Northeast States for Coordinated Air Use Management (NESCAUM) and a private developer to ensure that cleanup and reconstruction at the World Trade Center site be accomplished by equipment retrofitted with technology to curb emissions. A MOU is pending with ferry owners who operate in New York Harbor to reduce emissions from these diesel-fuel-operated craft. As part of our Great Lakes Initiative, a multi-year study with built-in reporting requirements has been designed for Lake Ontario.

Water - MOUs coupled with quarterly meetings with New York and New Jersey are used in the total maximum daily load (TMDL) program to track deadlines and keep apprized of progress.

Comprehensive Conservation and Management Plans (CCMPs), signed by both the EPA Administrator and the State Governor, are used in the National Estuary Program in New York, New Jersey, and Puerto Rico. The CCMPs contain a series of action plans, including the identification of responsible parties and dates for implementation.

Lakewide Area Management Plans (LAMPs) and Regional Area Plans (RAPs) serve a similar purpose as CCMPs in lakes programs. These are binational agreements between the U.S. and Canada, that contain a series of action plans, including the identification of responsible parties and dates for implementation. A fourth example, the Source Water Assessment Program (SWAP) is used for groundwater. If a state receives drinking water SRF funds, it is required to develop a SWAP. Specifically, SRF recipients are required to develop an assessment of potential threats to drinking water supplies, and once developed, share the SWAP with local stakeholders to encourage source water protection.

The second major set of accountability processes arises out of the negotiated memoranda of agreement (MOAs) with HQ for Air, Water, RCRA, compliance & enforcement, and other programs; these MOAs contain measures to track and ensure accountability in the Region (such as the identification of performance measures, and an accounting of FTE utilization by program). The MOAs further ensure accountability through reporting requirements (e.g., the required end of year report summarizes program activities during the fiscal year).

Accountability is achieved in the Region 2 Superfund program via the EPA-wide WasteLAN Information system used to document Regional Superfund accomplishments. Waste-Lan generated reports are used for setting annual targets, and then reporting and crediting annual program accomplishments. Similarly, the Region 2 Brownfields program uses the Brownfield Management System for reporting and crediting accomplishment for annual targets and measures.

Coupled with the MOA process and the other accountability mechanisms, the Region provides an annual Integrity Act Assurance Letter to the Administrator. The Administrator in turn uses the information to inform the President and Congress about the Agency's accomplishments. The letter primarily certifies fiscal accountability within the region, ensuring the protection of our programs, functions and operations from waste, fraud and mismanagement, and is developed based on the assurances of the Region's Division Directors, who have assessed the management control systems under their authority, in accordance with EPA's Integrity Act compliance program. The annual letter is also a means of providing HQ with a sense of some of our priorities for the next year. For example, in our last letter we indicated that during FY 2004, Region 2 will provide grants management training, offering both refresher and basic courses, through classroom sessions and various electronic communications; continue cross-divisional efforts on IGMS implementation, including full rollout and implementation of the "semi-electronic" process; finalize and issue new regional IAG procedures; and begin developing new automated tools to facilitate financial management of assistance agreements.

As we transition into the regular use of strategic plans, the aforementioned MOU process will undergo change. We note that the setting of regional goals will take place via an online commitment process. We envision that the teams that helped develop the current regional plan for achievement of the five national goals will prepare an annual progress report in each goal area for the Office of the Regional Administrator. These same teams would identify major activities that would be accomplished during the next fiscal year.

Associated with the preparation of the above mentioned goal progress reports, the region will work with Headquarters and others to undertake program evaluations to assess our environmental progress. For example, we expect to participate in Program Assessment Rating Tool (PART)

evaluations of EPA programs to be conducted by the Agency in 2005 and 2006, and we will continue to work with the OIG and GAO on assessments of the effectiveness of Region 2 programs. Additionally, we are preparing an annual State of the Environment (SOE) Report for the general public. A prototype SOE Report is currently being developed for distribution in FY'04; the report will provide highlights of environmental results achieved in each goal area and also identify where the challenges lie. Through the annual goal progress report, program evaluations, OIG and GAO assessments and the Region 2 SOE report, the region believes it will be able to provide an accurate evaluation of its environmental achievements for EPA Headquarters and the general public.

Chapter 5: Partnerships with States and Indian Nations

Successful partnerships with our states, Commonwealth and Territory governments, and the Indian Nations are central to the Region's efforts to protect the environment. The Region looks to its partners for information and ideas that will help us restore and better protect our common environment. Several vehicles that have facilitated the dialogue between the Region and its partners include: The National Environmental Performance Partnership System (NEPPS), Tribal/EPA Agreements (TEAs), and regularly scheduled meetings between the Region and its partners involving management and technical staff. This chapter highlights our partnering efforts with our States and Indian Nations.

In 1995, the National Environmental Performance Partnership System (NEPPS) was established jointly by EPA and the Environmental Council of States to allow states greater flexibility in directing resources toward their highest priority problems and in determining how best to achieve demonstrable environmental results. Performance Partnership Agreements (PPAs) are a key element of a state's or Indian Nation's participation in NEPPS. Performance Partnership Grants (PPGs) provide states and Indian Nations with administrative flexibility to manage multiple environmental grant programs.

Working with the state of New Jersey, Region 2 completed one of the first PPAs nation-wide in 1996. Currently, New Jersey has a comprehensive agreement covering all aspects of its environmental programs, and a PPG covering 11 EPA grant programs. In 1997, the state of New York entered into a combined PPA/PPG that covers three water programs, while the Virgin Islands opted for a PPG covering seven grant programs. The St. Regis Mohawk Tribe also entered into a PPG in 1998, which covered three grant programs.

With respect to our partnership with Indian Nations, the Region is working to build government- to- government relationships with all seven federally-recognized Indian Nations. The key components of our strategy for working with the St. Regis Mohawk Tribe (SRMT), the Seneca Nation of Indians (SNI), Oneida Indian Nation (OIN), the Tuscarora Nation, Cayuga Nation, Tonawanda Senecas, and the Onondaga Nation in Region 2 include: working on a government- to-government basis; recognizing them as the primary parties for setting standards; making policy decisions and managing programs; encouraging and assisting tribes in assuming regulatory and program management responsibilities; considering Indian Nation concerns and interests in decision making; and encouraging cooperation between Indian Nation, State and local governments and other federal agencies.

At present we provide financial assistance to five of the seven federally-recognized Indian nations located in the Region 2 area. The SRMT and the SNI receive grants directly from Region 2. The Tuscarora Nation, Cayuga Nation and Tonawanda Senecas receive grant funding - as they requested - through the Haudenosaunee Environmental Task Force (HETF). Until 1998, we also provided financial assistance to the Oneida Indian Nation (OIN) directly through grants.

The Indian Environmental General Assistance program is the key form of assistance, helping the Indian nations with program development, including development of Environmental Assessments, QA plans, GIS database development, environmental program capacity building, and development of regulations/codes and management programs. Consequently, both technical assistance and program grants support the Indian nations in their implementation of environmental program activities. Many of the actions being undertaken in Indian Country are described under the specific agency goals in chapter 2.

Consultation on the Regional strategic Plan

In developing this Plan, Region 2 coordinated closely with its States, Puerto Rico, the USVI and the Indian Nations. On October 29, 2002, regional staff met with representatives from the New Jersey Department of Environmental Protection (NJDEP) and the New York State Department of Environmental Conservation (NYSDEC). The discussions initiated the dialogue between the Region and its states concerning shared priorities to be reflected in this document.

Subsequent to the October 29, 2002 meeting, the Regional Administrator met with the NJDEP Commissioner on April 17, 2003 to further discuss EPA/NJ joint environmental priorities in conjunction with the NJ Performance Partnership Agreement. Based on the April discussion, five priorities (Fine Particulates and Clean Buses, Area-wide Brownfields, Environmental Justice Dialogue Meetings, Lead in Schools, and Wetlands Mitigation) were
integrated into the amended NJPPA which will run until June 30, 2004. These priorities will likely be included in the new multi-year PPA that the Region will be negotiating with the state.

Most recently, strategic planning was discussed at the October 7, 2003 quarterly meeting between the NJDEP Commissioner and the RA; the Commissioner indicated in order of priority: Continued efforts to reduce fine particulate emissions from diesel engines; Brownfields clusters; and, Lead in schools (and, perhaps more generally, other children's health/school issues).

NYSDEC representatives at the above- mentioned October 29, 2002 meeting, indicated that the state's priorities were in two areas: to continue to accelerate protection of air, water and land resources; and to become better stewards of lands and environmental resources. Subsequent to the October 2002 consultation meeting, the Regional Administrator discussed strategic planning priorities with the NYSDEC commissioner at a quarterly meeting occurring on October 9, 2003. The top three priorities articulated by NYSDEC's Commissioner included: Air quality with a specific emphasis on Children's health; Total maximum daily loads (TMDLs) and watershed protection; and, Contaminated Sediments.

Region 2 staff met with representatives from a number of the Indian Nations (Cayuga, St. Regis Mohawk, Oneida, Seneca) and the Haudenosaunee Environmental Task Force on October 24, 2002 to discuss Indian Nation Priorities in connection with regional planning. More recently, we met with the Indian Nation environmental managers on November 18 to provide a status report of our regional planning activities & to receive further input from the Indian Nation representatives. Based on the 2002 and 2003 consultations, all of the Indian Nations indicated an interest in having resources and tools to develop quality information on the environment; training and consultation were requested at regional and national levels to develop quality environmental information. The consultation meetings identified the following priorities for the respective Indian Nations:

Priorities for St. Regis Mohawk Tribe (SRMT):

- Hazardous waste cleanup and contamination of Indian Nation land, water, air, fish, wildlife and

people.
- More effective, proper and timely government-to-government consultation.
- Tailored enforcement capability. Enforcement that fits into and is appropriate for the community. Goal: fashion unique enforcement programs based on the way the tribal community would traditionally respond to an infraction, e.g., education rather than ticketing and fines. Need for funding continuity.
- Drinking water and surface water quality, and drinking water and sewage infrastructure.
- Increase Indian Nation resources. Avoid decreases in the GAP funding.

Priorities for Oneida Indian Nation:

- Water infrastructure issues: water and sewer capacity issues and communication with surrounding communities.

Priorities for Seneca Nation of Indians:

- Assessment, identification and remediation of hazardous waste.
- Need to sustain natural and cultural resources, such as land used for natural medicine gathering, forestry, water quality (fish consumption and non-point source pollution).
- Water quality issues, such as fish consumption and non-point source pollution.
- Communication between governments. Facilitate relationships on a state and local level.
- Air quality/ addressing air pollutants.

Priorities for the Cayuga Nation, Tuscarora Nation, Onondaga Nation, and Tonawanda Band of Senecas, as presented by the Haudenosaunee Environmental Task Force (HETF):

- Tonawanda, Tuscarora, and Cayuga Nations would like assistance on issues related to Underground Storage Tanks.
- Culturally-based environmental protection process/model. Target water quality, air quality, and environmental assessment. Goal: to protect traditional relationships with the environment, in terms of hunting, fishing, and other gathering practices.
- Traditional way-of-life model as alternative to EPA's risk-based methodology.
- Relationship with EPA and the States that goes beyond meetings and consultations. Indian nations need to develop a consistent relationship with all agencies.
- Traditional knowledge as a foundation for networking with other Indian nation/ indigenous groups, especially related to climate change.

At the most recent Indian Nation Leaders Meeting (November 17-20, 2003) the Region and members of the seven nations agreed to hold an additional annual meeting between the Indian leaders and Regional management at the Division Director level. These meetings would be further supplemented by Individual Indian Nation meetings with EPA; these meetings would include technical exchange between regional program staff and the environmental managers of the Nations.

The Region held its primary consultation with representatives from the Puerto Rico Environmental Quality Board (PREQB) and the US Virgin Island Department of Planning and Natural Resources (USVIDPNR) on November 7, 2002. During the discussion the USVIDPNR representative identified 11 priorities for the Virgin Islands; the PREQB identified 10 priorities. In the interest of addressing the most acute environmental issues in the USVI and Puerto Rico, Region 2 held subsequent consultation meetings with the USVIDPNR and PREQB on November 4 & 5, 2003, respectively. Based on the discussions, the top three priorities of each environmental agency in the Caribbean are:

USVI:

- Chemical Facility Preparedness and Prevention - The Virgin Islands has a large number of small facilities, with small volumes of chemicals that do not trigger reporting under TRI. These small facilities are not required to develop emergency response plans under SARA Title III, but potentially represent a risk.
- Asbestos and Lead - There is currently no health data available on lead levels in children. There is a need for better controls around asbestos abatement and lead removal. The regulations are good, need to focus on actual implementation of activities.
- Drinking water from cisterns and rainwater harvesting - These systems are pervasive in both VI and PR. There is a need to address the dangers posed by the products used to collect and store rainwater as well as the surfaces that water contacts. National Science Foundation has standards, but many products in use do not meet those standards.

Puerto Rico: Similar to the USVIDPNR, the PREQB identified the existence of a number of small facilities in Puerto Rico that do not report under TRI, that are not required to develop emergency plans under SARA Title III, but do potentially represent a risk. The other top priorities included:

- Hazardous and non-hazardous solid waste, particularly landfills that are closing and those that are not being managed consistent with regulations. Landfills are not in compliance with environmental rules and regulations.
- Drinking water and rainwater collection - This is a similar problem as in the Virgin Islands. Additionally, there is a need for improvements to the water infrastructure, both waste water and drinking water.
- Asbestos and Lead.

Each of our Caribbean partner agencies identified homeland security concerns as a fourth priority.

In combination with the consultation meetings noted above, Region 2 solicited written input from all of its State and Indian Nation partners on draft chapters1&2 of the Plan in May, 2003 and again in September 2003.