INTERSTATE ENVIRONMENTAL COMMISSION A TRI-STATE WATER AND AIR POLLUTION CONTROL AGENCY

THE START OF A NEW ERA

A NEW NAME IN THE NEW MILLENNIUM



2000

ANNUAL REPORT

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NEW YORK NEW JERSEY CONNECTICUT

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A TRI-STATE WATER AND AIR POLLUTION CONTROL AGENCY



2000

ANNUAL REPORT

OF THE

INTERSTATE ENVIRONMENTAL COMMISSION

.

formerly the INTERSTATE SANITATION COMMISSION

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Executive Director Chief Engineer Howard Golub January 24, 2001

The Honorable George E. Pataki The Honorable John G. Rowland The Honorable Christine Todd Whitman and the Legislatures of the States of New York, Connecticut, and New Jersey

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The Interstate Environmental Commission respectfully submits its report for the year 2000.

The members of the Commission are confident that with the continued support of the Governors and the members of the Legislatures, the Commission will maintain active and effective water and air pollution abatement programs.

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Respectfully submitted

For the State of New York

For the State of Connecticut

Vice Chair

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Chair

For the State of New Jersey

innerty the Interstate Sanitation Conducision

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STATEMENT OF THE CHAIRPERSON OF THE INTERSTATE ENVIRONMENTAL COMMISSION

I can think of no finer way to celebrate the true first year of the new Millennium (and the Commission's 64th anniversary) than to report, at long last, that procedural matters have been cleared away and our name has recently been changed to the more aptly descriptive *Interstate Environmental Commission (IEC)*.

From our early years in the 1930s and 1940s when the Commission dealt mostly with matters of sewage, we have taken giant strides forward in terms of the scope of our mission and greatly increased responsibilities. Clearly, the name Interstate Environmental Commission more accurately reflects our broad range of programs and activities that include air pollution, resource recovery facilities and toxics, and our continuing emphasis on water quality — an area in which we vigorously act as both a regulatory and enforcement agency.

In this role, after years of litigation before reaching a satisfactory conclusion in the matter of the operations at the Fresh Kills Landfill, our position is that there must be continued vigilance over operations at the Landfill to prevent any reoccurrence of debris fouling Staten Island and New Jersey shorelines and waters.

As the sole interstate pollution control agency for this tri-state region, I take particular pride in noting the Commission's engagement in cooperative environmental studies and programs with such groups as the New York State Department of Environmental Conservation, the New York City Departments of Environmental Protection and Health, the National Park Service and the College of Staten Island. One such focus is on a microbiological study in response to sporadic beach closures at Great Kills Park in Staten Island.

I also think it worthy of note that the Year 2000 marked an even ten years of Commission commitment and participation in an intensive sampling program in the Long Island Sound, as well as our continuing active membership on the Management Committees and various work groups for both the Long Island Sound Study and the New York-New Jersey Harbor Estuary Program. The IEC's far-reaching participation also includes the Long Island Sound Water Monitoring Work Group — a network partnership of 14 citizen organizations and government agencies with a goal of coordinating monitoring programs on every level of government.

In addition, I am pleased to report on our active role coordinating the Regional Bypass Work Group which addresses the issue of unplanned bypasses of raw and partially treated sewage. We at IEC are proud that the Commission spearheaded the efforts to put a pollution prediction model and notification protocols in place and, since 1998, we serve as the recipient and clearing center for calls regarding unplanned spills within our region. Also, since we revised our Water Quality Regulations in 1997, it is mandatory that this Commission receive early notification of planned sewage bypasses in order to determine whether these potential bypasses could be avoided or, at a minimum, lessened.

I would also like to emphasize that we are and will continue to work with the states' environmental departments and the U.S. Environmental Protection Agency to assist those agencies with their development of total maximum daily loads (TMDLs), especially for interstate waters.

As I stated last year, the areas of public education and public outreach are of particular interest to me. We have completed the second year of what I envision as a continuing program of working with high school students for hands-on studies in river analyses and marine biology. Several staff members also act as mentors for these high school students doing much needed water quality testing in the Hudson. In addition, we look forward to further increasing our lecture appearances in public schools, colleges and before citizen and environmental groups. Along with my fellow Commissioners, I must share my delight in being the recipient of so many positive comments following our annual boat inspection trip last August. Legislators, environmentalists, leaders of citizens groups and members of the press were grateful for the opportunity to take a close-up look at many of the region's environmental "hot spots" along a route that covered portions of the East River and the Long Island Sound, including stretches of shorelines in the Bronx, Fairfield, Suffolk, Nassau and Westchester Counties.

On a personal note, I want to conclude by offering my heartfelt thanks to my fellow Commissioners, IEC staff, government officials and legislators and volunteer environmentalists who expressed their support at a special ceremony on the campus of the College of Staten Island celebrating my reappointment as an IEC Commissioner and my reelection as Chairperson of an agency we can now proudly call the Interstate Environmental Commission.

Donna B. Gerstle Chairperson

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I. EXECUTIVE SUMMARY

It was just over 100 years ago that water quality in this region was at a low point due to industrial pollution and raw sewage. The most productive oyster and clam beds in the world were condemned, finfish stocks were depleted and tasted like "oil", health agencies were inundated with patients suffering from dozens of different types of waterborne diseases from using recreational waters, and the air was filled with coal dust. This was a time when interstate conflicts arose regarding the sanitary conditions of the waters surrounding and shared by the States of New York, New Jersey and Connecticut.

In the 1920s, the Tri-State Treaty Commission recommended the establishment of a body to control and abate water pollution. Following their recommendation, the Tri-State Compact establishing the Interstate Sanitation District and the Interstate Sanitation Commission was enacted in 1936, with the Consent of Congress. The ISC initially consisted of the States of New York and New Jersey; the State of Connecticut joined the Commission in 1941. As its structure suggests, the Commission has an overall responsibility of protecting the environment by viewing the District from a regional, impartial and unbiased perspective. Whereas each state deals with issues within its own political borders, the Commission can and does cross state lines. The Commission strives to harmonize water quality standards, regulations and requirements throughout its District. The ISC's work over the last 64 years has resulted in the similarity and compatibility that exists throughout the Region.

These standards and regulations have been periodically revised in order to reflect the most recent scientific and technologic information that deals with water quality, living marine resources and best intended uses of the waters. Throughout the 1930s, 1940s, and 1950s, the Commission issued Enforcement Orders for wastewater treatment plant construction that were to be the foundation for many municipalities' current infrastructure.

With positive changes in the ecosystem, it makes sense to make appropriate changes in the day-to-day focus of water pollution control. Over the years, many of the area's environmental and health departments changed their names to better reflect their missions. Due to its interstate nature and jurisdiction, to change the name of the Commission takes the adoption of appropriate legislation in the three member states, followed by the Consent of Congress. The last step in this process, the Consent of Congress, took place in 2000 and, on October 27, 20100, the President of the United States signed the Bill containing the language that changes the name of this agency from the Interstate Sanitation Commission to the *Interstate Environmental Commission (IEC)*. The new name — *Interstate Environmental Commission* — brings the Commission into the 21st Century and more accurately reflects the Commission's mandates, mission and responsibilities that embrace a broad range of programs and activities that include air pollution, resource recovery facilities and toxics. However, the IEC's continuing emphasis is on water quality — an area in which the Commission is a regulatory and enforcement agency.

The Commission has compiled an outstanding record and its programs and actions have greatly contributed to the improvements in the region's waterways. The Commission's year-round disinfection requirement which took effect in 1986 was instrumental in opening thousands of acres of shellfish beds year-round rather than only in the summer months. For the past several summer seasons, tri-state residents and tourists have suffered far fewer beach closings from elevated levels of coliform bacteria or wash-ups of harmful medical debris. In an effort to eliminate or, at a minimum, lessen the impacts from planned sewage bypasses, in 1997, the Commission amended its regulations to require mandatory notification to the IEC of planned sewage bypasses. Additionally, in conjunction with its three states' environmental and health departments, US EPA and NYC DEP, the Commission coordinated and spearheaded the effort to have a computer model developed to predict the impacts of unplanned sewage bypasses on area beaches and shellfish beds. As part of this effort, regional notification protocols were developed and have been in place since the 1998 bathing season and have proved to be effective. This is truly a regional success story.

During June 2000, the Commission issued its Strategic Plan which contains a series of goals and strategies that will address the issues facing the Region in the 21st Century. The IEC is in a unique position to take the lead on regional issues because, as an interstate agency, the Commission views the Region as an environmental entity and IEC can cross state boundaries in an impartial and unbiased manner.

The mission of the IEC is to protect and enhance environmental quality through cooperation, regulation, coordination, and mutual dialogue between government and citizens in the tri-state Region.

The goals of the IEC are to abate and control water pollution in the Interstate Environmental District and engage in the coordination of interstate air pollution problems and issues in order to achieve a healthy environment and a productive ecosystem. The IEC will implement the goals by:

- coordinating interstate and region-wide programs and enforcing the IEC's Water Quality Regulations,
- providing technical assistance and support to its member States,
- taking the lead on region-wide issues, and
- enhancing public and legislative awareness, and disseminating information.

The staff continues to fulfill IEC's technical and administrative responsibilities within the limitations imposed by the current resources. While somewhat increased, the ambient and effluent water quality sampling programs remain at reduced levels and, except for the Staten Island odor complaint answering service and limited investigations, the air pollution programs remain at a minimum level.

The objectives of the Commission's programs are to address specific environmental deficiencies and/or to assure compliance with the Tri-State Compact and the Commission's Water Quality Regulations. The programs are designed for gathering the information necessary for enforcement actions, opening waters for commercial and recreational shellfishing, opening waters for swimming, developing water quality and/or effluent criteria, and other needs that may arise.

Public involvement, education and outreach programs continue to be a high priority for the Commission. In addition to its day-to-day activities, the Commission regularly testifies at public hearings and meetings on various issues of concern, and lectures at local schools, colleges and to community groups on subjects dealing with coastal pollution, oceanography, habitat, living marine resources, sampling and data collection, and related Commission activities. During the past eleven years, the Commission has been a sponsor for Our World Underwater which gives young scholars the opportunity to get nationwide exposure to diverse organizations involved with the marine environment. Over the past eight years, law student internships have been awarded in conjunction with Pro Bono Students America/New York and New Jersey. For the second year, Commission staff have served as mentors for the River Project's Marine Biology Internship Program. The Commission regularly meets with and discusses issues of mutual concern with five similar interstate agencies concerned with water issues.

This report provides a record of the water and air pollution activities of the Interstate Environmental Commission for the period December 1999 through November 2000. To address the environmental problems within its area of jurisdiction, the Commission has focused on technical assistance, enforcement, engineering, planning, laboratory analysis, ambient and effluent water quality monitoring, statistical analysis, coordination, and public outreach and education.

WATER POLLUTION

The Commission's water pollution abatement programs continue to focus on the effective coordination of approaches to regional problems. Improving water quality so more areas can be used for swimming and shellfishing remains a high priority. The IEC's programs include enforcement, minimization of the effects of combined sewers and storm sewers, participation in the National Estuary Program, control of floatables, compliance monitoring, pretreatment of industrial wastes, toxics contamination, sludge disposal, dredged material disposal, and monitoring the ambient waters — especially with regard to opening new areas for swimming and shellfishing.

Throughout the District, planning and construction is under way to provide water pollution control and abatement from municipal and industrial wastewaters discharging into the IEC's District waters. It is estimated that over \$5.13 billion has been allocated by municipalities and bond act dispersements in the District for projects recently completed, in progress, and planned for the future.

For the third consecutive year, the Commission took the lead and coordinated the efforts of the Regional Bypass Work Group which is comprised of 16 federal, interstate, state, county and local agencies. The Work Group maintained notification protocols to inform each other of unplanned

bypasses and, based upon modeling software especially developed to predict the effects of those bypasses, determined if area beaches and shellfish beds should be closed to protect the health of the public. During the calendar year ending November 15th, a combination of 88 raw sewage, sludge, fuel, and chemical bypasses occurred, few of which resulted in closures.

The Commission's involvement in several legal actions continued this past year. Those actions are detailed in the Legal Activities section of this report and are highlighted as follows:

- participated as an amicus curiae (friend of court) in a New York State case alleging that the City of New York violated several treatment facility permits when it exceeded limitations of nitrogen discharges,
- continued involvement and oversight of the Consent Orders designed to prevent debris from escaping from the Fresh Kills Landfill located on Staten Island, and
- received an administrative determination favorable to the Commission that the IEC's Regulations must be included in a NJPDES permit.

The Commission continues its commitment and active involvement with the Long Island Sound Study (LISS) and the New York-New Jersey Harbor Estuary Program (HEP). IEC continued to actively participate on the Management Committees for both of these National Estuary Programs and on various work groups for these studies. With the Comprehensive Conservation and Management Plans (CCMPs) for the LISS and the HEP in place, IEC is actively involved with the work groups that are dealing with total maximum daily loads (TMDLs) for nutrients, toxics and pathogens. The implementation processes under way are due, in part, to both the New York and New Jersey environmental bond acts which have earmarked significant resources to the HEP and LISS for a variety of pollution control and abatement projects, habitat restoration and research.

IEC is continually updating its region-wide inventory of development projects within the District; this effort is presently in its thirteenth year. Among other things, this inventory contains estimates of the amount of sewage that will be generated by proposed projects. This information has been invaluable in determining whether the infrastructure — the sewage treatment plants and the sewer systems — has the capacity to accept additional wastewater from the construction of residential and mixed-use buildings, as well as hotels, marinas and recreational facilities.

IEC coordinates its compliance monitoring program with the three states' environmental departments, as well as with US EPA. This program consists of the Commission regularly sampling waste discharges from municipal and industrial permittees throughout the District. Using the IEC research vessel, the R/V Natale Colosi, the Commission again participated in a multi-agency intensive survey in Long Island Sound to continue to document dissolved oxygen conditions. This was IEC's tenth consecutive year as a participant in this important project. The Long Island Sound surveys were enhanced in 1998 with additional collection of water quality samples that allowed the Nassau County Health Department to identify phytoplankton species. Concurrently, water quality samples were

collected at the request of NYS DEC, Marine Resources, to determine the presence of a toxic dinoflagellate, *Pfiesteria piscicida*. For the fifth year in a row, at the request of NJ DEP, during the winter and spring of 1999-2000, the Commission collected water quality samples needed by NJ DEP to check the sanitary conditions of the shellfish waters of western Raritan Bay. These and other sampling programs are detailed in this report.

Since 1981, the Commission has been involved with the US Army Corps of Engineers' Dredged Material Disposal Management Plan for the Port of New York and New Jersey. This regional effort is to develop solutions that balance dredging requirements of the Port of New York and New Jersey with sound environmental and economic disposal alternatives. By consensus of its organizers, the Dredged Materials Forum has been incorporated into the HEP. The chairpersons of the Forum's work groups were designated as the Dredged Material Management Integration Work Group. The Commission took an active role by participating on the Mud Dump Site Work Group.

The IEC laboratory has been located on the campus of the College of Staten Island (CSI) since late 1993. In addition to its day-to-day operations, IEC's laboratory personnel continue to collaborate with CSI on environmental projects of mutual concern. The laboratory has been assisting NYS DEC - Region 2 in their project to assess the overall health of lakes and ponds that are located in all five boroughs of New York City. The IEC laboratory is certified by New York State and New Jersey, and has continued to participate in the US EPA's Water Pollution Laboratory Evaluation Program and Water Supply Microbiology Performance Evaluation Study. The laboratory is seeking acceptance in the National Environmental Laboratory Accreditation Conference.

IEC's library holdings and archives continue to be updated and provide an accessible regional depository of water and air quality related subjects. The Commission's current and historical holdings have been sought and made available to the academic community, consulting engineering firms, attorneys, environmental and public awareness groups, government agencies across the nation, and international entities.

AIR POLLUTION

Budgetary restrictions continue to keep the Commission's air pollution monitoring and response programs at a reduced level, including IEC's Staten Island field office remaining closed as has been the case since mid-1989. The Commission's 24-hour-a-day, 7-day-a-week answering service (718-761-5677) remains active and IEC personnel investigate as many complaints as its resources will allow. IEC also forwards complaints to the appropriate enforcement and health agencies.

During the 12-month period from October 1999 through September 2000, the Commission received 18 air pollution complaints — a decrease of 30% over the previous 12 months. As has been the pattern, most of the calls originate from Staten Island; this year over 94% of the complaints emanated from that Borough. Unlike past years, this year, no one neighborhood on Staten Island was grossly impacted by odors during the reporting period. Citizen complaints have proven to be an

invaluable source of firsthand information about poor air quality. Accurate odor descriptions could lead to the discovery of the emissions sources.

IEC continued its role as coordinator of the High Air Pollution Alert and Warning System for the New Jersey-New York-Connecticut Air Quality Control Region; conditions during the past year did not warrant activation of the system.

The Commission again participated in the Ozone Health Message System to alert the public of unhealthy ambient air conditions. Based on information received from its member states, the Commission disseminated 37 health messages — 17 for ozone and 20 for fine particulates — between June 1st and September 11 th to the appropriate government environmental and health agencies throughout the region.

