### Table of Contents

- **Executive Letter**  
  - Page 3

- **Sustaining the Pursuit of Excellence**  
  - Page 5

- **Improving Safety Performance**  
  - Page 7
  - The Safety Management System

- **Ensuring EH&S Compliance**  
  - Page 11
  - Commitment
  - Some Highlights of Con Edison’s Environmental Performance

- **Enhancing Relationships With Stakeholders**  
  - Page 17
  - Environmental Stewardship

- **Integrating EH&S Into “The Way We Work”**  
  - Page 21
  - Working Together

- **Identifying and Reducing Significant EH&S Risk Potential**  
  - Page 25
  - Risk Management
  - Strategic Implications of Risk
  - Proactive Initiatives
  - Broadening the Discussion About Risk

- **Promoting the Wise and Efficient Use of Natural Resources**  
  - Page 29
  - Resource Conservation
  - Communicating Conservation
Con Edison’s sustained pursuit of excellence is a cornerstone of the way we work. Our determination to achieve environmental and safety excellence in every endeavor is indispensable to the safe and reliable delivery of energy services.

This Environment, Health and Safety (EH&S) Annual Report is a frank assessment of our performance during 2003, and highlights the efforts and achievements of the men and women who worked to meet the goals of superior environmental stewardship and a workplace free of injury.

In working toward these objectives, the Environmental Management System (EMS) provided a solid framework for our 2003 performance. A companion Safety Management System (SMS), comprising the same fully integrated approach of policies, committees, working groups, training programs, and communication methods, was introduced during the year as well. These comprehensive systems foster a culture of excellence.

By applying these management systems, Con Edison has succeeded in sustaining the momentum achieved over the past several years while satisfying our commitments to regulators, customers, and the communities we serve. In addition, the company actively encourages all employees to apply their experience, creativity, and know-how to develop fresh solutions and new approaches that more effectively integrate EH&S considerations in all operational settings. Con Edison places special emphasis on developing processes and methods that enable us to focus on prediction and prevention of environmental and safety risks, rather than relying on response and reaction.

Everywhere we do business, we are committed to protecting the environment; making prudent, sustainable use of natural resources; and safeguarding the well-being of the customers and communities we serve and our employees.

Eugene R. McGrath
Chairman and CEO

Randolph S. Price
Vice President, EH&S
As a deregulated, highly competitive energy marketplace emerges, new expectations are redefining the way Con Edison does business. Similarly, the marketplace is transforming the way our customers do business with us. Con Edison operates an extensive energy-distribution infrastructure in one of the world's most densely populated corridors, and our environment, health and safety (EH&S) initiatives are an integral part of conducting our business.

Six key objectives focus the company's EH&S efforts.

They are:
- Improving safety performance
- Ensuring EH&S compliance
- Enhancing relationships with stakeholders
- Integrating EH&S into “The Way We Work” at Con Edison
- Identifying and reducing significant EH&S risk potential
- Promoting the wise and effective use of natural resources

These objectives drive the integration of our management tools in daily operations throughout the company and serve as the framework of this annual report.

Con Edison's Corporate Environment, Health and Safety Policy

Consolidated Edison, Inc., is committed to continuing to strive for excellence in its environment, health and safety performance while complying with all laws and regulations that apply to company operations. Business and operational decisions throughout the company incorporate environmental, health and safety aspects into the decision-making process. All employees of Con Edison, Inc., are held accountable for knowing the corporate environment, health and safety requirements that apply to their assigned responsibilities, and for using the information in planning and completing their work.

In support of this policy, Consolidated Edison, Inc.:
- Maintains procedures and provides training to meet the corporation's environmental, health and safety standards
- Openly communicates about environmental, health and safety issues with employees, customers, and stakeholders
- Promotes effective environmental, health and safety program management through auditing, monitoring, reviewing, and corrective action efforts
- Advances the identification, analysis, and management of environmental, health and safety risks to foster prediction and prevention efforts
- Recognizes and encourages outstanding environmental, health and safety performance
- Strives to reduce waste and prevent pollution through recycling and effective work-planning programs, and promotes strategies for energy conservation
- Maintains systems, procedures, and personnel to prevent incidents and, when necessary, respond to emergencies
- Promotes research to develop new and better technologies for environmental, health and safety management
- Establishes metrics to track progress
Consistent with Con Edison’s commitment to safeguarding its employees and the public, special emphasis on communicating all aspects of the company’s newly introduced Safety Management System (SMS) was initiated during 2003. The SMS not only comprises policies and procedures, but also frames the structure of committees and working groups, training programs and tools, communication methods, and performance monitoring. Broadly patterned after the company’s effective Environmental Management System, the SMS serves as a full-spectrum resource in Con Edison’s pursuit of an injury-free workplace. The influence of Con Edison’s SMS extends to every company employee and all contractors who perform work for the company.

Photos (left): Protective hoods and goggles for inspecting manhole covers

Extensive training, proper procedures, and personal protective equipment (PPE) are important to working safely. In response to input from employees, Con Edison developed new flame-resistant protective hoods and goggles needed when checking the condition of manholes.

The overall SMS is made up of 13 major categories, each clearly and explicitly addressing a different aspect of working safely. These are:

Standards – Safety and health considerations are an integral part of the company’s business practices, and all employees are held accountable for knowing the requirements that apply to their work. The six key EH&S objectives, which are listed on page 5, serve as the cornerstone for strategic planning and focus.

Procedures – These consist of written general rules and regulations, Corporate Safety Procedures (CSP), Corporate Safety Instructions (CSI), and provisions for monitoring their use and effectiveness.

Communication – Free and open communication builds a dialogue among employees, allows sharing of experiences, and supports creation and maintenance of a safe work environment. Communication includes regular safety meetings, local safety gatherings, publications, intranet resources, monthly videos, and labor/management committee meetings.

Training – From courses at the company’s Learning Center to on-the-job instruction, training is essential to working safely. Job-title and job-specific training requirements are listed in an online Web site, and training effectiveness is monitored by the EH&S training committee, which also develops recommendations to improve training effectiveness.

Performance Monitoring – Using Con Edison’s Safety and Health Information Management System, health and safety incidents are tracked. This information is used to prepare monthly safety reports. In addition, trends are analyzed to determine likely causes of problems and identify opportunities for performance improvement.
**Risk Management** – Risk management teams made up of representatives from EH&S, engineering, and operating groups carry out an ongoing program of risk identification, risk prioritization, and the development and implementation of risk-control and reduction measures.

**Auditing** – Compliance audit programs provide a comprehensive health and safety review using ongoing scheduled and unannounced inspections. Management system inspections are also conducted to evaluate effectiveness throughout the corporation and within specific operating units.

**Performance Improvement** – To improve safety performance throughout the company, the SMS incorporates the results of safety audits, root-cause analysis of incidents, recommendations for enhanced procedures, self-assessments, and defined goals for both corporate initiatives and business-unit programs.

**Rewards and Discipline** – This structured system is keyed to the principle that all employees are responsible for implementing the safety and health requirements that apply to their jobs.

**Reporting Without Retaliation** – An array of options is available for employees to openly express concerns about potentially unsafe or hazardous conditions. Every employee can call a “time out” to stop work if a safety, health, or environmental question arises. All employees have unlimited access to an Ethics Helpline, corporate ombudsman, and independent monitor to report concerns anonymously.

**System Oversight** – In-depth, ongoing monitoring and evaluation is provided by the EH&S Committee of the Board of Trustees, the Environmental Quality Review Board, the Environment and Safety Committee, corporate EH&S staff, Leadership Teams, and field safety personnel.

**Emergency Preparedness and Response** – The company has an established Incident Command System (ICS) protocol that serves to mobilize and deploy resources in case of system emergencies.

**Job Site Protection** – The SMS recognizes the job site as the front line for safeguarding employees at work. Specific safety measures include job briefings, job safety analysis, equipment preparation and energy-isolation processes, personal protective equipment, and contractor safety programs.

The following highlights from selected elements provide a broad overview of the scope of the SMS.

**Corporate Safety Procedures and Corporate Safety Instructions**

Given the variety of workplace settings in Con Edison’s business, a great many safety laws and regulations influence operations and planning. Corporate Safety Procedures have been developed as comprehensive guides to the laws and regulations that pertain to the company’s work. Corporate Safety Instructions are keyed specifically to particular types of tasks. The Corporate Safety Instructions are indispensable for supervisors, mechanics, and other hands-on employees.

**Training**

Con Edison provides an enormous selection of safety training and refresher courses for all employees. Many of these courses are taught at The Learning Center, Con Edison’s state-of-the-art training facility. To track every employee’s training record, an intranet-based information resource logs courses completed, classes scheduled, and necessary refresher training to maintain certifications. Con Edison also administers a rigorous Contractor Oversight Program and provides training for contractors and subcontractors. This training includes guidance in preparing Health and Safety Plans (HASPs) that contractors must provide before beginning any work for the company.

**Communication**

Open and unobstructed communication is the foundation of working safely. Con Edison facilitates open communication throughout the organization in many ways. The EH&S InfoLine is an intranet resource that provides every employee with direct access to the environment, health and safety resources the company makes available. Monthly issues of The Excellence Files, an award-winning, fast-paced video distributed to all operating groups, feature updates on safety and environmental issues.
Similarly, *A New Leaf* is a monthly intranet publication that highlights safety and environmental stories from the field.

Open personal dialogue is also a priority for safety communications. The company conducts regular labor/management committee meetings where participants exchange information and opinions on safety issues and other topics. In the field, an ongoing cycle of safety breakfasts, safety talks, and safety day celebrations helps reinforce the pursuit of an injury-free workplace. In cases when some near-mishap or incident almost caused an injury to people or harm to the environment, any employee can file a Close Call report without fear of retaliation. By sharing their experience in this way, employees help each other learn how to avoid similar hazards.

### Monitoring and Improving Safety Performance

Con Edison employs a computer-based resource called the Safety and Health Information Management System, which is used by all operating organizations to log all safety-related incidents. Monthly reports are circulated using information from the database. This archive helps spot trends and serves as a useful guide to performance improvements. In addition to these records, the company also relies on recommendations from safety audits, Close Call reports, and lessons learned on the job to improve safety performance. Investigations are carried out for all accidents to determine root causes and identify corrective actions that can help prevent a recurrence. Corporate safety goals are developed annually to drive further performance improvement.

The overriding goal in implementing all elements of Con Edison’s SMS remains achieving an injury-free workplace.

---

### Safety and Health Performance for 2003

#### OSHA Injury Incidence Rate

- 1999: 3.51
- 2000: 3.87
- 2001: 3.88
- 2002: 3.58
- 2003: 4.33

The Occupational Health and Safety Administration (OSHA) Injury Incidence Rate is a federally standardized measure for quantifying injury rates. The rise in this measure for 2003 was due, in part, to an increased number of slips, trips, and falls resulting from particularly harsh winter weather at the start of the year and fewer employee-hours worked.

#### Number of Recordable Injuries

- 1999: 464
- 2000: 519
- 2001: 503
- 2002: 427
- 2003: 514

Recordable injuries are those where medical attention beyond basic first aid is required.

Con Edison is committed to pursuing improvement in safety performance and strives for an injury-free workplace. The newly introduced Safety Management System described at the beginning of this section will be instrumental to the effective pursuit of these goals.
Sustaining the Pursuit of Excellence
Ensuring EH&S Compliance

Commitment

Con Edison prides itself on its commitment to working effectively with federal, state, and local environmental regulators. Within the company, environmental, health and safety considerations are an integral part of all business and operational planning. Con Edison has built an outstanding record of complying with the vast array of applicable environmental and safety rules and regulations, but achieving genuine excellence in environment, health and safety goes far beyond compliance with regulations. The pursuit of excellence demands the committed support of every employee throughout the organization. At Con Edison, all employees are held accountable for knowing the corporate environment, health and safety requirements that apply to their work and for using this information when carrying out their assigned responsibilities.

Some Highlights of Con Edison’s Environmental Performance for 2003

Con Edison’s Environmental Excellence Management Information System, called e2mis, tracks and records information about environmental incidents, hazardous waste, and other parameters. These data form the basis for our monthly reporting system, and are used to chart environmental developments and analyze trends to help evaluate the company’s progress in key measures of environmental performance.

A major portion of the data in this annual report was compiled using the information stored in this system. In addition, supplementary information is gathered during environmental compliance audits carried out throughout the year. All of these findings are communicated to appropriate company personnel at all levels. For example, Con Edison has an Environmental Quality Review Board comprising two outside environmental attorneys and a Sloan School of Management professor specializing in organizational dynamics. This group advises the EH&S Committee of the Board of Trustees and consults with the Environment and Safety Committee, which is made up of senior corporate officers. The Environment and Safety Committee closely tracks company EH&S performance and helps frame initiatives for further performance improvement.

Con Edison's Continuous Emissions Monitoring System (CEMS) provides real-time analysis of stack emissions 24 hours a day. This equipment samples a range of parameters to help operators assure clean, efficient fuel combustion, and monitors opacity in accordance with New York State Department of Environmental Conservation regulations.
The following performance indicators provide an overall view of Con Edison’s environmental performance during 2003.

State-Regulated Opacity Exceedances

The New York State Department of Environmental Conservation (NYS-DEC) has requirements for reporting opacity (or smoke) events at facilities with boilers and other combustion equipment. An opacity exceedance is defined as an operational error resulting in any smoke condition from stacks that exceeds 20 percent opacity during any given six-minute interval. During 2003, Con Edison experienced only two such opacity exceedances. As shown in the chart, the same number of events took place in 2002.

Since the advent of deregulation, Con Edison no longer operates facilities for generating electricity exclusively. The company does, however, have six steam generating plants to supply its district steam system, some of which provide limited electrical output. To keep a close watch on opacity, Con Edison maintains a Continuous Emissions Monitoring System on plant stacks, which provides plant operators with real-time analysis of stack emissions. Quarterly reports on opacity events are given to the NYSDEC.

As part of the company’s opacity reduction program, all incidents are documented in e2mis. Incidents are singled out for review and discussion by operations, technical, and maintenance managers, as well as station managers. Events are investigated in detail to determine their root cause and to develop corrective measures for reducing opacity events. Because equipment problems are the most common cause of opacity incidents, Con Edison conducts a regular cycle of preventive maintenance.

Curbing opacity events is just one element of Con Edison’s program to protect air quality.

Performance Indicators for 2003

Number of State-Regulated Opacity Exceedances

Toxic Release Inventory (pounds) (In accordance with U.S. EPA requirements, 2003 TRI will be reported on July 1, 2004.)

Number of SPDES Exceedances
Toxic Release Inventory

Beginning in 1998, utilities became subject to federal requirements for Toxic Release Inventory (TRI) reporting. For Con Edison, substances covered by these reporting requirements are generally those released during the combustion of fuel. These reports are due on July 1 of each year for the previous year. The data presented on page 12 shows the amounts Con Edison reported from 1999 through 2002. In accordance with United States Environmental Protection Agency (EPA) requirements, quantities for the year 2003 will be reported on July 1, 2004.

SPDES Exceedances

In accordance with the federal Clean Water Act and New York State Environmental Conservation Law, the state issues State Pollutant Discharge Elimination System (SPDES) permits to facilities that discharge wastewater or stormwater to rivers or other bodies of water, including groundwater. These permits specify discharge limitations and require routine monitoring of discharges to confirm compliance with those limitations. Monitoring results are then reported on a monthly or quarterly basis, as required, to the New York State Department of Environmental Conservation (NYSDEC).

During 2003, Con Edison experienced three wastewater discharge permit exceedances (see graph on page 12). We hold 21 SPDES permits, each specifying particular discharge sampling intervals and standards. We conduct thorough root-cause analysis of any discharges that exceed permit limits. Steps to improve performance include administrative changes to enhance operational efficiency, upgrades to maintenance practices, and investment in new engineering controls. During 2003, the company took more than 3,000 samples to determine whether discharges were within permit limitations. Although only three of the samples failed to meet permit discharge limits, we continue to strive for zero. In addition, according to federal Environmental Protection Agency (EPA) criteria, the three instances were not considered to be “significant noncompliance,” either
as individual events or collectively. Monitoring SPDES discharges is only one step Con Edison takes to safeguard water quality. To learn more about these efforts, see the Enhancing Relationships With Stakeholders portion of this annual report.

Transformer Releases to Sewers and Waterways
In 2003, transformer oil leaked into sewers or waterways on 15 occasions (see graph on page 13). Though the number of leaks is the same as for 2002, the quantity of oil involved was approximately half of last year's volume. As required, these incidents were reported to regulatory agencies. In all cases of transformer oil leaks, the affected areas were subsequently cleaned thoroughly.

Con Edison manages more than 75,000 pieces of oil-filled equipment, including transformers in underground vaults, on utility poles, and on specially constructed outdoor surfaces. Because corrosion is a common cause of transformer leaks, Con Edison inspects transformers, conducts preventive maintenance on a regular basis, and, if necessary, removes transformers for thorough refurbishment before returning them to service. In an ongoing program, as an added precaution, we install secondary containment and leak-detection devices where appropriate.

Dielectric Fluid Leakage to the Environment
Dielectric fluid is a nonconductive oil, similar to mineral oil, used in pipe casings that enclose electrical transmission feeder cables. The oil transfers heat away from the conductors, and insulates and protects them against arcing. A total of 27,967 gallons of dielectric fluid was released to the environment from Con Edison facilities during 2003 (see graph on page 13). While this is a significant improvement from the prior year, our goal is to eliminate all dielectric fluid releases. It should be noted that most of the oil is subsequently recovered during cleanup operations.

Releases commonly result from contractor excavation work, the impact of water main breaks, corrosion, and equipment failures. We have, therefore,
instituted improved operating procedures and established an online database that maps underground facilities to help curb instances of third-party damage.

Another significant 2003 initiative was the establishment of a Con Edison cable research facility devoted to exploring new conductor designs, including transmission feeder cables that may be able to function safely and reliably without the need for dielectric fluid. Presently, the company uses an advanced leak-detection methodology to help minimize the size of fluid releases. With this methodology, a small quantity of tracer compound is added as a marker to the dielectric fluid in the casing of buried cables. Highly sensitive sampling and monitoring equipment is mounted in laboratory vans that drive along above the cables. This equipment can detect minute quantities of the tracer from air samples drawn at ground level. If elevated levels are detected, technicians can quickly pinpoint the location so that repairs can be made promptly.

The company also conducts engineering analyses to identify potential trouble spots. These analyses have proven valuable in correctly predicting the cables most likely to leak fluid. The company excavates these pipes, removes the old coating, repairs piping as necessary, and restores their coating. The program has already resulted in a marked reduction of leaks from these cables.

**Chemical Releases Above Reportable Quantities**

During 2003, there were eight chemical spills exceeding federally established reportable quantities (see graph on page 13). Of this number, four were antifreeze and four were refrigerants. Con Edison makes it a practice to report chemical releases even if the spills occur in containment areas. The company has taken steps to reduce the likelihood of equipment failures that can result in chemical releases and to improve operator performance. Furthermore, root-cause analysis is used to investigate causative factors in spills and identify safer handling methods and procedures.
Con Edison’s Environmental Management System (EMS) has been an extremely successful mechanism for driving steadily improving environmental performance over the past several years. Con Edison received formal companywide certification of its EMS from the International Organization for Standardization (ISO) in February 2002. The ISO 14001 Standard identifies the elements of an EMS necessary for an organization to effectively manage an environmental program. Certification to the ISO 14001 Standard confirms that Con Edison has a comprehensive environmental management protocol in place, that it satisfies demanding international standards, and that it is being properly implemented. To maintain certification, Con Edison’s EMS is subjected to ongoing reviews carried out by independent ISO registrars.

Environmental Stewardship

To sustain our ongoing pursuit of environmental excellence, the company has instituted a Validation and Improvement Process (VIP), which allows us to conduct a structured series of organizational self-assessments and evaluations of EMS element implementation. Participants in the process include EH&S managers, line managers, supervisors, and field employees. The findings of these self-assessments are used to develop specific enhancements for planning, methods, and procedures to improve EMS program implementation.

CERES: The Coalition for Environmentally Responsible Economies

Con Edison endorsed the CERES principles in 2001. CERES is an organization of environmental, public interest, and community groups. It also comprises investors, financial advisors, and analysts that represent more than $300 billion in invested capital. CERES challenges companies to conduct their businesses in an environmentally responsible manner, guided by 10 principles:

- Protection of the biosphere
- Reduction and disposal of wastes
- Energy conservation
- Safe products and services
- Informing the public
- Audits and reports
- Sustainable use of natural resources
- Risk reduction
- Environmental restoration
- Management commitment

Con Edison’s commitment to these 10 principles is restated every year when the company issues its CERES report to the public. This report is an extensive document that provides an in-depth situation analysis of the company’s environmental initiatives, describes its environmental performance, and explains different aspects of its environmental mission. Con Edison’s most recent CERES report is available on the company’s Web site, www.conEd.com/ehs.

Photos (left): Strategic partnerships provide educational opportunities

Con Edison acts in partnership with environmental organizations and educational institutions to support numerous environmental educational initiatives and events that promote conservation and awareness of the environment. Our partnerships include the Trout-in-the-Classroom program, the New York City High School for Environmental Studies, and the New Yorkers for Parks’ Daffodil project.
Community Involvement

Providing environmental educational opportunities for young people and families in our service area is a key part of Con Edison’s strategic partnership program. In addition to providing corporate support to many environmental organizations, large and small, we actively participate through our community relations programs and event sponsorships throughout the year.

Con Edison partners with a number of environmental organizations to supply materials and study guides for schools to use in science projects, nature projects, and conservation studies. These organizations include the National Audubon Society, National Wildlife Federation, Council on the Environment of New York City, and New York Zoological Society/Wildlife Conservation Society.

Among the groups that have received support from Con Edison is Clean Air Communities (CAC). This organization was established in 1999 with a $5 million donation from Con Edison, and it represents a collaborative effort with the Natural Resources Defense Council (NRDC), Northeast States Clean Air Foundation (NESCAF), and New York State Department of Environmental Conservation (NYSDEC). Working with CAC, Con Edison has completed a number of projects that help improve the air quality in the metropolitan area and beyond. These include an advanced truck stop electrification project at the Hunts Point Cooperative Market; one of New York City’s largest commercial solar array installations atop two buildings in the Greenpoint section of Brooklyn; and a steam conversion at Seward Park, a residential complex on Manhattan’s Lower East Side. The Seward Park project is described more fully in the Promoting the Wise and Effective Use of Natural Resources portion of this report.

Con Edison supports Queens College’s Project GLOBE initiative, which seeks to improve science studies in New York City schools. International in its scope, Project GLOBE is based on the principle that youngsters learn science best by doing science. Students perform scientific research at developmental levels appropriate to their ages, then send the data they collect to a Project GLOBE database that can be accessed over the Internet by students in 96 nations.

In 2003, the company also sponsored the Green Horizons Conference for the eighth consecutive year. This gathering teaches middle school youngsters about careers in natural resources and environmental sciences. Students from schools throughout the city visited an array of workstations in soil science, entomology, field ecology, horticulture, woodland restoration, animal ecology, and conservation planning.

On America Recycles Day, hundreds of children and their families attended a celebration at Con Edison’s Learning Center and enjoyed creating robots from scrap computer parts and other materials, participating in games with a recycling theme, learning about recycled products, and winning prizes.

For the fifth year, we sponsored the New York City Envirothon competition for high school students. The students are tested on their knowledge in environmental specialties including aquatics, forestry, urban source pollution, and soils and geology, as well as wildlife. We also sponsored the New York City Department of Environmental Protection’s annual Art and Poetry contest.

In 2003, the company developed a pair of comic books featuring DC Comics Justice League superheroes. One comic book takes readers on an exciting journey through time, reinforcing a conservation message. The other promotes electrical safety and wise use of energy. More than 1.5 million copies of these comics were distributed through the New York City Board of Education to elementary and middle school students throughout the city. Along with the comics, Con Edison also provided lesson plans that offered guidance to educators in using the comics to teach their students more about environmental responsibility.
Some Organizations We Support

Alley Pond Environmental Center, Inc.
American Littoral Society
American Museum of Natural History
Bank Street College of Education/Tiorati Workshop
Battery Conservancy
Bay Improvement Group, Inc.
Beccak Environmental Education Center, Inc.
Bloomfield Conservancy
Broadway Mall Association
Bronx River Alliance
Brooklyn Botanic Garden
Brooklyn Bridge Park Coalition
Brooklyn Center for the Urban Environment
Brooklyn Children's Museum
Brooklyn Technical Research Foundation
Central Park Conservancy
Cherry Tree Association
City Parks Alliance
City Parks Foundation
Classroom Inc.
College of Staten Island Foundation
Community Environmental Center, Inc.
Council on the Environment of New York City
Earth Celebrations, Inc.
Earth Day New York
Earth Watch Institute
Environmental Education Advisory Council
Floyd Bennet Garden Association
Fort Tryon Park and the Heather Garden Committee
Fresh Air Fund
Friends of Alice Austen House, Inc.
Friends of Hudson River Park
Friends of Palisades Interstate Park Commission
Friends of Pelham Bay Park
Friends of the High School for Environmental Studies

Friends of Van Cortlandt Park, Inc.
Gowanus Canal Community Development Corporation
Green Guerillas
Greenbelt Conservancy, Inc.
Historic House Trust of New York City
Historic Hudson Valley
Horticultural Society of New York, Inc.
Hudson River Environmental Society
Hudson River Museum of Westchester
Hudson Valley Regional Envirothon
Inform, Inc.
Jay Heritage Center
Lower East Side Ecology Center
Madison Square Park Conservancy
Magnolia Tree Earth Center
Medgar Evers College Environmental Conference
Mercy College EH&S Management Program
National Academy of Engineering Technology & Environment Program
National Audubon Society
National Wildlife Federation
The Nature Conservancy of New York
Neighborhood Open Space Coalition
New York Botanical Garden
New York City Department of Environmental Protection
New York City Soil and Water Conservation District
New York Landmarks Conservancy
New York League of Conservation Voters
New York Parks and Conservation Association
New York Restoration Project
New York State Envirothon Committee
New York Water Environment Association, Inc.
New York Zoological Society/Wildlife Conservation Society
New Yorkers for Parks
Ninth Street Garden and Park, Inc.
New York State Urban and Community Forestry Council

Olana Partnership
Phipps Community Development Corporation
Pleasant Village Community Gardens, Inc.
The Point Community Development Corporation
Prospect Park Alliance
Queens Botanical Garden
Queens College Foundation, Inc.
Queens County Farm Museum
Randall's Island Sports Foundation
Research Foundation/Project Stir
Resources for the Future
Reverend Linnette C. Williamson Memorial Park Association, Inc.
The River Project
Riverdale Nature Preservancy, Inc.
Rocking the Boat
Saint Joseph’s College Gifts of the Earth
Scenic Hudson, Inc.
Seton Falls Park Preservation Coalition
South Queens Park Association
Staten Island Botanical Garden, Inc.
Staten Island Institute of Arts and Sciences
Staten Island Zoological Society
Sustainable South Bronx
Take-a-Kid-Fishing, Inc.
Teatown Lake Reservation, Inc.
Theodore Gordon Flyfishers, Inc.
Trees New York
The Trust for Public Land
United Way
Urban Divers
Wave Hill, Inc.
West Harlem Environmental Action
West Side Community Garden, Inc.
Yonkers Downtown Waterfront Development Corporation
Con Edison has long-standing “Standards of Business Conduct” that frame a set of guidelines to help all employees work together effectively, sustain the company’s commitment to the environment, and join in common cause to provide customers with safe, reliable delivery of energy services. In support of this commitment, “The Way We Work” initiative has been established. Its six core principles are:

- Plan the work and work the plan
- Seek and accept responsibility
- Communicate openly
- Work in teams
- Improve continuously
- Celebrate success

The company has defined one of its six key EH&S objectives as “Integrating EH&S Into The Way We Work.” One example of this is the practice of celebrating success for EH&S achievement.

Awards are presented at three levels: First-level awards recognize notable performance, and are given as warranted throughout the year. Second-level awards are presented for significant EH&S achievement by operating units throughout the company.

Third-level awards represent the highest EH&S honor the company presents to employees, working as individuals or in teams, for outstanding contributions to our environmental, health and safety effort. Award winners demonstrate the embodiment of “The Way We Work.” Since 1996, 516 people have been presented with third-level awards. In 2003, 79 employees – contributing as individuals, or through team efforts – were recognized at the eighth annual EH&S Awards Breakfast. Their contributions ranged from innovative technical solutions to operational challenges, to effective implementation of environmental programs, to personal commitment to safety on the job, to making a positive environmental impact on behalf of the communities we serve.

Awards were sorted by categories corresponding to each of the six key EH&S objectives (see page 23).

**The Excellence Files**

This fast-paced, award-winning monthly video series features stories from every corner of the company. It helps communicate a broad spectrum of environmental and safety issues. Programs cover a wide range of topics including regulatory matters, corporate environmental and safety initiatives, accounts of outstanding performance, areas where more focus is needed, environmental research, and much more. Segments often feature employees sharing experiences, or describing new methods and practices to improve environmental and safety performance. The production is circulated in VHS, CD, and DVD formats, and is available on the company intranet.
Improving Safety Performance

Marty Czastkiewicz - senior specialist
Tony Savino - outside plant mechanic A
Christopher Eusebio - senior electrical technician
Keon Yong - senior electrical technician
Vincent Casoria - splicer
Vincent Gambino - section manager
Robert LaPollo - splicer
William E. Smith - associate engineer A
John Tully - splicer
Richard Benkwitt - senior specialist
James Feeney - senior specialist
Robert Malizia - field operations planner
Ronald Nardone - outside plant mechanic A
Robert Kraese - senior electrical trainer
Dan Morales - manager (O&R)
Thomas Granai - customer operations supervisor
William Rosenthal - customer operations supervisor

Ensuring EH&S Compliance

Dennis Spafford - mechanic A
John Bronson - operating mechanic A
John Caprino - operating mechanic A
Benny Fazio - operating mechanic A
William Geerlings - senior specialist
Samuel Herbert - operating mechanic A
Lima Jones - project specialist
Adam Kushner - mechanic A
Gary Mannina - outside plant mechanic A
Nicholas Mastodicasa - operating supervisor
Kenneth Sgroi - operating mechanic A
Thomas Warner - senior specialist

Enhancing Relationships With Stakeholders

Dan Pontecorvo - senior specialist
Jim Siesfeld - scientist
Dennis Callahan - operating general supervisor
James Clark - field operations planner
Timothy Warn - senior specialist

Integrating EH&S Into “The Way We Work” at Con Edison

Charlie Palmeri - operating supervisor
John Caputo - senior substation operator
Gary Marinese - senior specialist
James McCandless - senior substation operator
Michael Mosco - senior substation operator
Roy Olsen - mechanic A
Thomas Passarelli - senior substation operator
Martin Watt - senior substation operator
John A. Wilson - senior substation operator
John Gaughan - project specialist
Dipti Ghosh - senior engineer
Robert Kretzschmar - project specialist
Armand Agasian - senior engineer
Charles Conroy - senior engineer
Daniel Cunningham - technical specialist
Anthony Guastafeste - section manager
Richard Lambert - department manager
James Lucente - technical specialist
Brian Manzino - senior engineer
Irina Northup - section manager
Edward Taylor - section manager

Identifying and Reducing Significant EH&S Risk Potential

Walter Tuft - supervisor (TOC)
Carlos Vega - manager
Ronald Andreacchio - section manager
Louis Biscuiti - administrator
Susan Duffy - section manager
Michael Gentile - department manager
Kevin Greene - section manager
Steven Marcotigiano - systems manager
Wayne Olansen - department manager
Victor Basso - project specialist
Kevin Fagan - field operations planner
Patrick Losee - field operations planner
Bonita O’Leary - manager
Lyle Seagriff - field operations planner
Paul L. Smith - field operations planner
Carol Sylvester - systems manager

Promoting the Wise and Effective Use of Natural Resources

Gary Elgort - senior engineer
Emilio Frederick - senior designer
Rose Lee-Gaughan - project manager
William Heavey - field operations planner
Oleg Krotoff - senior scientist
Robert Nahrwold - construction inspector
Aaron Williams - senior engineer
Kan Yam - senior engineer
**Risk Management**

Being prepared to cope with and minimize the potential risks inherent in any undertaking is key to working safely and protecting the environment. Risk management is a primary component of our Environmental and Safety Management Systems. Con Edison’s approach to risk management is focused on identifying, analyzing, managing, and, to the greatest extent possible, reducing environmental, health and safety risk potential that could affect our business and the communities we serve. Leading this effort are risk management teams composed of representatives from throughout the company.

Through fieldwork, the teams assess equipment, processes, and procedures to identify potential environmental, safety or health risks. The tool used is called a Failure Modes and Effects Analysis. Each potential risk is evaluated to determine its defining features, its likelihood, its possible consequences, and our ability to detect or control it. The teams then compare these considerations and assign a priority factor for each of the identified risks. Using this information, design and control mechanisms are developed so that enhanced measures can be put in place to minimize these potential risks.

**Photos (left): Water sampling and treatment equipment**

Con Edison’s wastewater treatment facility processes water from the company’s underground facilities and other sources. Extensive sampling before and after processing confirms that treated water meets standards specified in State Pollutant Discharge Elimination System permits.

**Strategic Implications of Risk**

Con Edison has established a Strategic Risk Council to identify, prioritize, and manage emerging regulatory requirements as well as societal and stakeholder concerns and expectations. The council uses a systematic approach and applies internal and external resources to assess and categorize risks. Priority issues are assigned to designated teams for further evaluation and management, as appropriate. Since strategic issues tend to evolve over time, the council works to anticipate future risks and prevent them from developing into challenges that could adversely affect the company or its ability to serve its customers.

**Proactive Initiatives**

In addition to measures mandated by regulations and environmental laws, Con Edison has a tradition of pursuing independent environmental initiatives instituted strictly by the company itself. These programs go beyond legal requirements, and are carried out by Con Edison with the goal of helping mitigate risks to the environment.

**Voluntary Mercury Regulator Removal Program**

Gas regulators are present at virtually every residential and commercial gas customer’s premises. These devices regulate incoming gas to provide correct delivery pressure for stoves, boilers, water heaters, and other gas-fired equipment. Some older regulators were manufactured containing varying quantities of mercury at a time before the health hazards of this material were fully appreciated. Several years ago, Con Edison instituted a program to remove all mercury-equipped regulators from the premises.
of its gas customers. Also, working with other utilities, trade associations, and government health and environmental agencies, Con Edison sponsored a Mercury Awareness Forum for plumbers to educate them about protecting the public and the environment. By 2003, the company had successfully completed the program.

Transformer Retrofill Program

In the past, the utility industry made widespread use of polychlorinated biphenyls (PCBs) as a dielectric fluid in electrical equipment, such as transformers. PCBs were identified as a possible risk to public health and the environment during the 1970s. Many of Con Edison’s transformers were manufactured with dielectric formulations containing high levels of PCBs. Beginning in 1985, Con Edison began replacing PCB-equipped transformers with non-PCB units.

In addition, the company initiated an extensive inventory of its distribution transformers in street vaults and substations with the intention of retrofilling or removing equipment containing oil with PCB concentrations of 50 parts per million (ppm) or more. Retrofilling involves draining dielectric oil from each unit and replacing it with fresh, PCB-free dielectric fluid. Transformers processed in this way are then tested to confirm that the dielectric fluid in their main tanks is below the 50-ppm threshold, and then they are classified as non-PCB in accordance with EPA regulations.

As part of a 10-year program, more than 7,000 underground transformers on the distribution system were either removed, replaced, or retrofilled. Transformers on the overhead distribution system were also sampled, and any with PCB concentrations at or higher than 50 ppm have been removed or replaced. Con Edison’s program goes beyond EPA requirements, which specify removal or retrofilling of distribution transformers containing PCB concentrations in excess of 500 ppm.

Defending Water Quality

As described in the Ensuring EH&S Compliance portion of this annual report, Con Edison has an extensive program to control pollutant discharges to the region’s waters. However, the company’s extensive underground distribution facilities, such as manholes and vaults, often collect runoff water following rainstorms or snowfalls. Often, this runoff is contaminated with oil from passing vehicles, road surfaces, and other sources including the company’s electrical equipment. If this contaminated water were allowed to drain into sewers, the oil could be drawn off into rivers. To help prevent this from happening, Con Edison has more than 2,000 “oil minders” installed in its underground structures that drain to the sewer system. These devices sense the presence of oil in the water and prevent both water and oil from being released to the sewer system. When contaminated water is encountered in an underground structure, Con Edison pumps the water into a tanker truck that transports it to a company treatment plant for removal of contaminants before releasing the purified water into the sewer system in accordance with its sewer discharge permit.

MGP Program

From the early nineteenth century until approximately the 1950s, the gas used for street lighting, cooking, heating, and powering equipment was a manufactured product, not the natural gas that is used today. Thousands of Manufactured Gas Plants (MGPs) nationwide heated coal, and sometimes petroleum products, to produce gas that was then piped to customers or stored in gasholder facilities. By the late 1950s, virtually all MGPs had ceased operation as plentiful supplies of natural gas became available. Most sites that formerly housed manufactured gas plants and gasholders were sold and put to other uses.

At sites where such facilities operated, residual deposits of coal tar and other chemicals may remain in the soil. There are 50 locations that have been identified as sites where Con Edison or its predecessor companies
operated MGPs in our service territory. Con Edison has signed voluntary agreements with the New York State Department of Environmental Conservation to investigate 45 of these 50 locations. The other five locations are being addressed under other NYSDEC initiatives.

The company will carry out investigative studies of all 50 sites to assess if there is any residual material and, working in concert with NYSDEC and the New York State Department of Health (NYSDOH), determine if any cleanup is required.

Broadening the Discussion About Risk

In October of 2003, Con Edison hosted its second annual environmental forum, entitled *Commitment to Excellence: Managing Environmental Risk*. The gathering assembled environmental leaders from 24 major corporations in the Northeast to discuss environmental excellence and examine practices to identify, evaluate, and manage environmental risk.

The keynote speaker at this conference was Mindy Lubber, executive director of CERES. She noted the major significance of managing environmental risk as a component in every company’s environmental policy. “The approach to managing environmental risk is truly the fundamental soul of a corporation’s strength morally, financially, legally, and scientifically. It is a fundamental part of a company’s core strategy, or what could be thought of as the DNA of the core strategy – part of the way the company works,” said Lubber.

The day’s events included workshops and discussion groups aimed at facilitating an open exchange of ideas on key corporate environmental questions.

An account of the forum and its conclusions was published in the January 2004 issue of *Corporate Environmental Strategy*, a leading journal for environmental professionals.
When purchasing material, Con Edison works to find goods with substantial recycled content. For example, all general-use paper for office operations is made from 30 percent post-consumer recycled content, which are materials that would otherwise have been disposed of as a solid waste. The stock for this EH&S Annual Report is also recycled paper, and the ink used in its production is environmentally benign. To conserve further, beginning next year Con Edison will print fewer copies of the EH&S Annual Report and encourage viewing of the report via the Internet.

In the course of normal business operations, Con Edison makes use of a great deal of material, ranging from office supplies to heavy industrial equipment. Once these goods have reached the end of their service lives, the company works hard to avoid discarding them. Con Edison sells excess items and supplies for their second-hand value, and segregates and sells scrap metals (see chart on page 30).

The company has designated coordinators in all operating groups to focus on minimizing waste and maximizing recycling of paper, batteries, toner cartridges, wooden pallets, and other recoverable materials.

Computers and other electronic office equipment no longer needed by the company are donated to Per Scolas, an organization that refurbishes the equipment and then provides it at low cost, or no cost, to schools throughout the country.

By extending the usefulness of the materials it uses, Con Edison’s resource recovery program lightens the burden on the waste stream and generates revenues, which is good for the environment and for business.

Hazardous Waste Manifested Off-Site

During 2003, the company shipped 9,500 tons of hazardous waste to licensed commercial waste-handling facilities (see chart on page 30). The major part of this hazardous waste consisted of lead-contaminated sediment that accumulates over time in underground structures, such as manholes. In 2003, the NYSDEC approved the limited use of a lead stabilization process that renders the waste nonhazardous. This measure has significantly reduced the amount of hazardous waste generated. Once fully implemented, the lead stabilization process will dramatically reduce the largest component of our hazardous waste.

Other initiatives were also implemented in 2003 that reduced the amount of hazardous waste from various company operations. For example, Con Edison adopted a process that removed residual PCBs from gas pipes. The use of this treatment allows the pipes to be sold as scrap metal and recycled, reducing the materials going to landfills and providing Con Edison with another source of revenue.
Greenhouse Gas Emissions

As part of its operations — principally the combustion of fossil fuel to supply its steam system, electric substation operations, and distribution of natural gas — the company generates airborne emissions (see chart on page 31). Climate change attributed to “greenhouse” gas emissions has emerged as an issue of worldwide concern over the past several years. In 2001, Con Edison began a companywide inventory of its greenhouse gas emissions.

CO₂ Emissions

The principal source of the company’s carbon dioxide (CO₂) emissions comes from the fuel used for generating the steam that supplies our district steam system. The company’s steam service area extends from the southern tip of Manhattan to 96th Street, and is the largest such system in the world. The system is optimized through the use of cogeneration that allows energy produced during steam generation to be harnessed for generating electricity as well. However, steam production is highly weather-dependent, so the actual emissions volumes are highly weather-dependent. In addition, to help assure low emissions, the company uses only low-sulfur fuel, oil, and clean-burning natural gas in its utility boilers, and refined kerosene in its combustion turbines.

Sulfur Hexafluoride Emissions

In 1999, Con Edison entered into a memorandum of understanding with the EPA, voluntarily enlisting in the Sulfur Hexafluoride (SF₆) Emissions Reduction Partnership for Electric Power Systems. SF₆ is an insulating material for high-voltage switching contacts. It has 23,900 times the heat-trapping potential of carbon dioxide. To date, no suitable alternative has been found for this application. To better manage the SF₆ in our electric infrastructure, Con Edison developed a special monitoring device that quickly spots equipment leaks. Since joining the program, Con Edison

Resource Conservation Performance Indicators for 2003

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed paper and cardboard</td>
<td>1,095 tons</td>
<td>1,165 tons</td>
</tr>
<tr>
<td>Scrap AC/DC meters</td>
<td>139 tons</td>
<td>213 tons</td>
</tr>
<tr>
<td>Scrap OB meters</td>
<td>640 each</td>
<td>640 each</td>
</tr>
<tr>
<td>Scrap cable (regular)</td>
<td>3,349 tons</td>
<td>3,307 tons</td>
</tr>
<tr>
<td>Scrap cable (PILC)</td>
<td>4,136 tons</td>
<td>3,627 tons</td>
</tr>
<tr>
<td>Scrap iron and steel</td>
<td>871 tons</td>
<td>957 tons</td>
</tr>
<tr>
<td>Toner cartridges</td>
<td>9 tons</td>
<td>10 tons</td>
</tr>
<tr>
<td>Tin and aluminum gas meters</td>
<td>18 tons</td>
<td>23 tons</td>
</tr>
<tr>
<td>Network protectors</td>
<td>71 each</td>
<td>190 each</td>
</tr>
</tbody>
</table>

Recycling Totals for 2002 and 2003
has reduced its releases of SF$_6$ by the greenhouse gas equivalent of more than 7.4 million tons of carbon dioxide, for a reduction of 42 percent since the start of the program.

**Methane Emissions**

Methane emissions result chiefly from the company’s natural gas distribution system. The sources of these emissions include leaks from supply stations and surface facilities as well as releases from pipe emissions. To reduce these emissions, Con Edison has enhanced inspections and maintenance at gas facilities, and continues to implement equipment upgrades on an ongoing basis. In addition, a research program is being conducted using a newly developed natural gas recovery trailer. This piece of equipment draws the natural gas from sections of pipe that must be taken out of service. Rather than releasing the gas, it is stored in the trailer until it can be reinserted into the pipe. The pilot program testing this method showed that it significantly reduced the amount of methane going into the atmosphere.

In 1993 Con Edison became one of the first companies to join the United States Environmental Protection Agency’s Gas STAR program. As a STAR partner in the program’s transmission and distribution sector, the company evaluates the program's best management practices for reducing natural gas emissions and works to implement those that are applicable to our operations.

In April of 2003, the Gas STAR Program awarded Con Edison a Certificate of Achievement “for aggressively reducing methane emissions and helping lead the way to reducing climate change impacts.” Methane is a greenhouse gas that has 21 times the heat-trapping potential of CO$_2$. This potential is represented as carbon dioxide equivalence (CO$_2$e) and is used to compare the different greenhouse gases. Over the last two centuries, methane concentrations in the atmosphere have reportedly more than doubled.

Since partnering with EPA in 1993, Con Edison has achieved a reduction in methane emissions of 2.6 billion cubic feet, which is equivalent to removing 230,000 cars from the nation’s highways for one year or planting 313,000 acres of trees! The EPA has called Con Edison’s commitment to reducing methane emissions “a model of environmental leadership for other companies to follow.”

**Seward Park Steam Conversion**

A new steam energy system located in an underground vault at the Seward Park Housing Cooperative quietly showcases energy efficiency and reduction of pollutants released to the air. As noted in the earlier Community Involvement section of this report, the project was carried out under the auspices of Clean Air Communities, a collaborative of Con Edison, the Natural Resources Defense Council, the New York State Department of Environmental Conservation, and the Northeast States Clean Air Foundation.
A host of energy efficiency control measures reduce total energy needed and minimize pollution. The measures include the installation of network controls and central monitoring, recycling of steam condensate, and more effective shut-off valves, traps, and heat recovery hardware.

The new installation displaces approximately 40 percent of the output from Seward Park’s four residual fuel oil burning boilers with a centralized system that uses 60 percent natural gas in a significantly more efficient manner through the cogeneration of electricity and steam. This conversion, together with Seward Park’s energy efficiency initiatives, will eliminate emissions of 29.8 tons of sulfur dioxide, 23.1 tons of nitrogen oxides, 2.7 tons of carbon monoxide, 3.3 tons of particulate matter, and 13,521 tons of carbon dioxide annually on Manhattan’s Lower East Side. In addition, the new system will reduce fuel delivery truck traffic and diesel truck idling in the community.

Communicating Conservation

The company encourages all customers to use energy wisely. It offers two publications, Everyday Energy-Saving Tips and Appliance Guide. The first is filled with simple, easy, and practical methods that can be used in any home to save energy all year round. The second offers useful suggestions for getting the most from existing appliances and explains how to choose energy-efficient models when buying new ones.

In addition, all Con Edison customers receive a copy of Customer News in each billing cycle. This newsletter communicates timely information about energy issues, offers guidance for wise energy use during times of peak demand, and promotes conservation initiatives such as the EnergyStar program. The “Bulletin Board” section of Customer News often promotes the efforts of various local environmental groups and solicits volunteers for environmental events such as the American Littoral Society’s Annual Beach Clean-Up Day.

Timely information on energy conservation and other environmental issues is also provided at the company’s Web site, www.conEd.com. For youngsters interested in conservation, and also interested in having fun, there is a special children’s Web site at www.conEd.com/kids. Visitors can learn more about energy, how it is used in the home, how to help parents be energy-smart, and how to use energy safely.
About Con Edison

Consolidated Edison, Inc. [NYSE: ED], is one of the nation's largest investor-owned energy companies, with $10 billion in annual revenues and approximately $21 billion in assets. The company provides a wide range of energy-related products and services to its customers through the following six subsidiaries: Consolidated Edison Company of New York, Inc., a regulated utility providing electric, gas, and steam service in New York City and Westchester County, New York; Orange and Rockland Utilities, Inc., a regulated utility serving customers in a 1,350 square mile area in southeastern New York State and adjacent sections of northern New Jersey and northeastern Pennsylvania; Con Edison Solutions, a retail energy services company; Con Edison Energy, a wholesale energy supply company; Con Edison Development, an infrastructure development company; and Con Edison Communications, a telecommunications infrastructure company and service provider.

Copyright © 2004

Printed on recycled paper