

*New York City  
Department of Environmental Protection  
2004 Environmental, Health & Safety  
Annual Report*



*May 2005*



## TABLE OF CONTENTS

<b>1</b>	<b><u>Message from Commissioner Emily Lloyd</u></b> .....	<b>3</b>
<b>2</b>	<b><u>EHS Policy Statement</u></b> .....	<b>4</b>
<b>3</b>	<b><u>DEP Operations</u></b> .....	<b>5</b>
<b>4</b>	<b><u>Building and Sustaining DEP's EHS Program</u></b> .....	<b>8</b>
4.1	Background.....	8
4.2	Programs.....	9
4.3	Training.....	9
4.4	Implementation.....	12
4.5	Employee Programs.....	12
4.6	Facility Auditing .....	14
4.7	Spill Prevention Program.....	15
<b>5</b>	<b><u>Major Bureau Achievements</u></b> .....	<b>16</b>
5.1	Bureau of Water Supply EHS.....	16
5.2	Bureau of Water & Sewer Operations EHS.....	18
5.3	Other Bureaus.....	18
5.4	Major Accomplishments.....	19
<b>6</b>	<b><u>Conclusion</u></b> .....	<b>23</b>



## **1. A MESSAGE FROM COMMISSIONER LLOYD**

DEP is a large and complex agency, charged with an important public mission: the delivery of water to millions of New York City residents and the treatment of millions of gallons of wastewater every day. For an agency in the water and wastewater business, the presence of hazardous chemicals and hazardous machinery is a simple fact of life, and workplace risks are always present. In this kind of environment, the challenge with respect to Environmental, Health and Safety (EHS) concerns is to have an effective structure in place to ensure a continued focus on these important matters. The EHS compliance program that DEP has created will serve the agency well by improving employee health and safety and by reducing the number of instances of non-compliance with applicable EHS laws and regulations.

I am pleased to report that, over the past year, the agency's compliance program has matured into a full-fledged, comprehensive resource for all employees. While much emphasis has been on two of our major operating bureaus, DEP is committed to expanding the full reach of our EHS program to the entire agency.

We are particularly proud that we have completed the development of nearly 50 separate EHS compliance programs. We have also created an Employee EHS Handbook which summarizes these important programs. In addition, more than 2100 DEP employees have received training on these programs.

We continue to communicate the importance of the EHS message through our compliance newsletter, intranet site, and employee awards program. Our Employee Concerns Program continues to provide an avenue through which employees may raise concerns, either openly or anonymously.

Over the past year, we have continued to implement our successful audit program. MIS development has progressed with a new Action Item Tracking Table to allow real-time access to track completion of audit action items. An agency-wide compliance obligation tracking database is currently being piloted.

We have initiated a “Legacy Assessment Program” for BWS and BWSO facilities to ensure that potential residual lead, PCB, mercury and asbestos contamination is identified and remediated. Finally, we have undertaken a Spill Prevention Program which includes tracking of spill incidents, incorporation of spill prevention into training sessions for employees and contractors, and implementation of preventive maintenance procedures.

Our goal has been to develop an EHS program that will have a lasting impact on the agency’s culture – one that will continue to flourish. I am confident that, over the past year, we have made important strides in meeting that important goal.

## **2. DEP EHS POLICY STATEMENT**

*The New York City Department of Environmental Protection’s (DEP) primary mission is to protect the environmental health and well-being of City residents by providing an abundant and safe supply of drinking water, treating and properly disposing of wastewater, and ensuring that adequate drainage is provided for storm water runoff. In furtherance of this mission, DEP operates and maintains the City’s water supply and wastewater systems, including (among other facilities) reservoirs, dams, aqueducts, tunnels, gatehouses, wastewater treatment plants, pumping stations, laboratories, and combined sewage overflow facilities.*

*DEP also interprets, administers and enforces a number of local laws, rules and regulations intended to protect the environmental health, welfare and natural resources of the City, including the New York City Air and Noise Codes, local laws on hazardous material spills and asbestos remediation, and the City’s community Right-to-Know Law.*

*In performing all of these activities, DEP employees are committed to providing the people of New York City with superior service and a healthy environment.*

*As an agency with an environmental mission, DEP is especially sensitive to protecting natural resources, ensuring the health and safety of its employees, and promoting a healthy environment in the communities in which it operates. Accordingly, in performing its day-to-day functions, DEP is committed to:*

- *Informing and educating our employees, contractors, suppliers, and the general public about the importance of environmental, health and safety concerns;*
- *Making sure that our daily operations are conducted in a manner that protects the environment and safeguards the health and well-being of our workforce and of the public we serve;*
- *Establishing effective programs that ensure the agency’s compliance with all applicable environmental, health and safety laws, rules and regulations;*
- *Encouraging policies and practices which prevent or reduce pollution, conserve resources, and promote efficiency without sacrificing adherence to such laws, rules and regulations; and*
- *Establishing appropriate and effective systems to monitor and gauge the agency’s progress in meeting the foregoing commitments.*

*DEP and its predecessor agencies have a proud legacy of service to the City and its residents, spanning a period of over 150 years. In a complex and changing world, it is incumbent on all DEP employees not only to do their jobs well, but to conduct themselves in a manner that is consistent with the underlying purpose behind everything we do — namely, protecting and preserving a healthy environment and quality of life for all New Yorkers. By following the principles enumerated in this Statement, which are intended to reflect and embody this standard of conduct, we hope to continue the legacy of service and dedication over the next 150 years and beyond.*

### **3. DEP OPERATIONS**

DEP's 6,000 employees are committed to supplying the best possible service to the people of New York while providing a safe and healthy environment. The agency's responsibilities cover a broad range of activities, centered on managing the City's water supply and wastewater treatment systems. They also include handling hazardous materials emergencies and toxic site remediation, overseeing asbestos removal, managing citywide water conservation programs, and collecting water and sewer fees. DEP's chief operations are implemented among the following bureaus:

#### Office of Environmental, Health & Safety Compliance

The Office of Environmental, Health & Safety Compliance is charged with the responsibility of ensuring that DEP complies with applicable federal, state and local environmental and occupational health & safety laws and regulations. It is also responsible for overseeing Bureau compliance with such laws as well as policy development, facility compliance auditing and employee training.

#### Bureau of Customer Services

The Bureau of Customer Services oversees water conservation through metering and leak survey and enforces water use regulations to prevent water waste, theft of service, and threats of contamination from illegal connections. The Bureau of Customer Services also provides consumers of New York City's municipal water and sewer systems with accurate billings and courteous customer service.

#### Bureau of Environmental Compliance

The Bureau of Environmental Compliance is comprised of the Division of Air & Noise Policy, Permitting and Enforcement, the Asbestos Control Program, the Division of Emergency Response and Technical Assessment, and the Environmental Economic Development Assistance Unit. These divisions respond to hazardous material emergencies, as well as air and noise code complaints and inspect and monitor for asbestos removal projects. The Bureau is also responsible for certifying asbestos handlers, inspecting and issuing operating certificates to stationary combustion and

industrial process sources, maintaining a comprehensive database of facilities containing hazardous and toxic materials, and helping to implement the requirements of the Clean Air Act.

#### Bureau of Environmental Engineering

The primary responsibility of the Bureau of Environmental Engineering is to plan, design, and construct major water quality related capital projects. These projects focus on two important issues for the City: the continued improvement of water quality within the New York Harbor and estuaries, and the delivery of high quality drinking water.

#### Bureau of Human Resources and Management

The Bureau of Human Resources and Management provides administrative support and oversight for the entire Department in a number of areas such as Human Resources Management, Facilities Management and Construction, Fleet Administration, Downstate Security, Management Analysis, Fiscal Services, Capital Budgeting and Expense and Revenue Budgeting.

#### Bureau of Public and Intergovernmental Affairs

The Bureau of Public and Intergovernmental Affairs manages the public information function of the agency in New York City and its watershed. It is responsible for all press releases and media inquiries, environmental education, special projects and events; production of all public information, both print and electronic; and for management of the graphic and photographic needs of all DEP bureaus. The Bureau is also responsible for communicating with all federal, state and local government officials regarding legislative issues, and is the liaison between New York City's 59 community boards and the Agency.

#### Bureau of Water & Sewer Operations

The primary responsibilities of the Bureau of Water & Sewer Operations are to operate, maintain and protect the City's drinking water and wastewater collection (sewer) systems; to protect adjacent waterways; and to plan and develop the Department's Capital Water and Sewer Design projects. The Bureau also approves and inspects water and sewer connections performed by licensed plumbers and/or authorized contractors. The Bureau has overall responsibility for the approval and inspection of all public and private construction projects within New York City that could impact the City's water or sewer systems.

#### Bureau of Water Supply

The Bureau of Water Supply is responsible for managing, operating, maintaining and protecting New York City's upstate water supply system to ensure delivery of a sufficient quantity of high quality drinking water. The Bureau is also responsible for



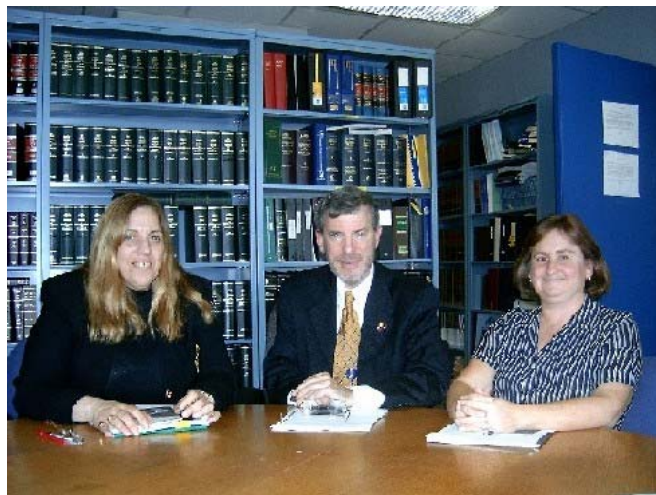
water system planning, water resources management, acquisition and management of water supply and watershed lands, and providing security for the water supply system.

### Bureau of Wastewater Treatment

The Bureau of Wastewater Treatment maintains the chemical and physical integrity of New York Harbor and other local water bodies and viability of the New York water environment through the removal of organic and toxic pollutants from the City's wastewater; control of discharges from the Combined Sewer Overflows and dry weather bypassing; management of operation of treatment plant collection systems; and integration of watershed management concepts into facilities' planning and design. The Bureau is also responsible for the enforcement of a city-wide industrial pretreatment program and a pollution prevention program, and the operation of water pollution control plants, wastewater pumping stations and dewatering facilities.

### Bureau of Legal Affairs

The Bureau of Legal Affairs is charged with providing all legal services required by DEP to fulfill its mission. The bureau is also responsible for identifying potential legal problems, bringing them to the attention of appropriate personnel, explaining options and the risks associated with each, and assisting staff in carrying out the actions decided upon by management.



*General Counsel and EHS Legal Staff*

## **4. BUILDING AND SUSTAINING THE DEP EHS PROGRAM**

### **4.1 Background**

In August, 2001, the New York City Department of Environmental Protection signed a plea agreement following certain violations of federal environmental, health and safety laws. Since that time, DEP has developed the critical elements of an effective environmental, health and safety (EHS) compliance program: written programs, training, implementation of programs, employee concerns, management structure, and auditing compliance. Although all of these efforts have components which require additional work, the building blocks to effectuate a successful EHS program are in place. This Annual Report summarizes the accomplishments, challenges and future EHS goals for DEP.

#### *Putting Structures in Place*

The first major step in building a comprehensive EHS Program was the Commissioner's establishment in 2002 of the Office of Environmental, Health & Safety Compliance (OEHSC). OEHSC is charged with the development of EHS compliance, training and auditing programs. OEHSC also provides technical and regulatory assistance to DEP operating bureaus, which, in turn, have their own EHS staffs. Together, OEHSC and Bureau EHS' mission is to provide support and direction in complying with relevant federal, state, and local standards, guidelines and regulations as well as to establish a management system for monitoring the effectiveness of agency-wide environmental, health and safety policies.



*OEHSC Staff*



A number of committees have continued to operate over the past year to ensure that senior management, together with all of the bureaus within DEP, is involved in the continued building and implementing of the EHS program. The Executive Oversight Committee, comprised of the Commissioner and senior management, oversees all elements of the EHS program and ensures that resources are made available to this effort. The Environmental Coordination Committee and the Health and Safety Coordination Committee, each including bureau representatives, have participated in the drafting of EHS standard operating procedures.



*Commissioner Lloyd displays the Employee Environmental, Health and Safety Handbook at an Orientation*

## **4.2 Programs**

DEP conducts a wide range of activities in providing its core services of water delivery and wastewater treatment. DEP identified almost 40 regulatory areas involved in its day-to-day operations which could benefit by the adoption of written environmental and health and safety programs. DEP is proud that it has completed the writing of these programs, which instruct employees on how to perform their jobs in compliance with applicable EHS laws and regulations, and serve as the cornerstone of the DEP environmental, health and safety compliance effort. The programs are available electronically to DEP employees on the DEP EHS intranet site and have been synopsized in an easy-reference Employee EHS Handbook.

## **4.3 Employee Training**

The DEP centralized agency-wide EHS training program has three components: (i) an OEHSC EHS professional training team and bureau EHS training divisions; (ii) EHS awareness and competency training provided to DEP employees by Con Edison Incorporated (Con Ed); and (iii) a plan to ensure that DEP employees continue to receive all required initial and refresher EHS training in an effective and timely manner.



*Confined Space Drill*

### OEHSC Training Division

- This unit has grown and assumed greater responsibility for oversight of DEP EHS training needs. The OEHSC Training Unit provides the majority of the Agency's annual Right-to-Know/Hazard Communication training for office workers. It reviews the bureaus' training records and training materials to determine which classes should be conducted by bureau EHS or by OEHSC and which should be conducted by outside sources. It is also responsible for developing, writing and publishing, in print or on the Web, training materials and information relevant to the health and safety of all employees. These materials include *V.I.E.W.S.*, the OEHSC quarterly employee newsletter, and the OEHSC Web site, which will be served in-house this year on *Pipeline*, the new DEP Intranet address.
- Some of the unit's 2004 accomplishments include standardizing throughout the Agency the Right-to-Know/Hazard Communication presentation for office workers; creating a facility-specific Right-to-Know/Hazard Communication script to facilitate standardized training to non-office workers; developing a Spill Prevention training presentation for use throughout the Agency; providing EHS-related Discipline training for all managers and supervisors; and creating a monthly training calendar for distribution throughout the Agency.
- OEHSC is very proud of its publication of the *Employee Environmental, Health & Safety Handbook* which summarizes DEP EHS policies and procedures in an easily readable format for all employees.



*Confined Space Drill*

### Con Ed-Based Employee Training

- EHS training for DEP employees at Con Edison began in June, 2003. More than 2,000 DEP employees, from the Bureaus of Water and Sewer Operations, Environmental Engineering, Management & Budget and Water Supply had received awareness and competency training on more than 30 programs when the initial training cycle concluded in June, 2004.
- Since June 2004, Con Ed has continued to provide such training to new hires and to employees requiring periodic refresher training.
- BWT employees have been receiving both awareness and competency training since July 2004.



*DEP Employees Train at Con.Ed.*

### Future Training Goals

- As part of an agency-wide initiative, through the Department's Bureau of Human Resources and Management, the OEHSC Training Unit is helping to develop a personnel/training database management system. A key feature of this management information system will be notification to the employee and the appropriate EHS office when any refresher training, re-certification or re-licensing is required. The database will also perform basic scheduling and record-keeping functions.

## **4.4 Implementation**

By August 2004, DEP had substantially implemented programs in 44 subject matter areas. OEHSC continues to work with bureau staff to ensure that all tasks required for full implementation of a program are completed and that compliance is maintained in the future.

One major initiative underway is the Legacy Program. In 2004, DEP commenced this effort to inventory and assess each of the more than 350 BWS and BWSO facilities for "legacy" issues: lead, mercury, PCBs and asbestos. Although DEP has audited each facility (and will continue to do so) to address any immediate issue with respect to any of these contaminants to ensure the health and safety of its workers and the protection of the environment, the Legacy Program will determine whether there is residual contamination as a result of past operations. All information will be entered into a database which already contains relevant historical data. Finally, recommendations from the assessments will be categorized as follows: 1) those that require immediate response because of potential employee exposure, 2) those that require some management activities and 3) those that can be incorporated into existing contracts or must go through the contract bid and award process to implement them.

## **4.5 Employee Programs**

### **Employee Environmental, Health and Safety Handbook**

In furtherance of the DEP goal to educate our employees about important EHS matters, DEP has developed the Employee Environmental, Health and Safety Handbook. This Handbook is comprised of summaries designed to be "plain language guides" to the more detailed EHS policies and procedures developed by DEP EHS Committees. The Handbook simply and clearly lists key procedures and the responsibilities of managers, supervisors and employees in an easy-to-reference format. Employees may access the full text of any procedure in the "library" of the DEP Intranet site at <http://pipeline> at "Health and Safety."

## EHS Tasks and Standards

The DEP Bureau of Human Resources and Management has begun the process of revising the “Tasks and Standards” for each job title to ensure that employee job responsibilities include performance standards related to EHS requirements. The new guidelines will be introduced in the coming year for staff at the management level, and will hold every manager accountable for EHS goals and for communicating same to employees. In 2006, all DEP job descriptions will include EHS goals and responsibilities.



*FDC David Tweedy presents the first EH&S “Serious About Safety” Awards. (l to r) Frank Ivone (BWS), FDC Tweedy, Michael Mitts (BWSO), Timothy Kelly (BWSO), William Cadellina (BWSO), and Robert Bye (BEE).*

### “Serious About Safety” Awards

In an effort to improve awareness and share information about environmental, health and safety compliance achievements throughout the agency, DEP has established the *Serious About Safety* Awards Program, for which all DEP employees are eligible. This effort is intended to highlight the many individual accomplishments contributing to the agency’s implementation of a comprehensive EHS compliance program. Employees may be nominated by their supervisors for these awards. Award recipients will receive a monetary award and certificate, and their EHS achievements will be highlighted in agency-wide communications, including the employee newsletter, *The DEP Digest*, and *Pipeline*, the agency’s intranet site.

### Environmental & Health and Safety Recognition Awards

DEP continues to present EHS achievement awards at our annual Employee Recognition Day award ceremony. Two awards, one for environmental achievement and one for health and safety, are presented to the winning employees by the DEP Commissioner. Award recipients receive a certificate and a monetary award, and have their photos taken with the Commissioner. Presenting these awards at the Employee

Recognition Day is an excellent opportunity to celebrate accomplishments of DEP employees while promoting the importance and awareness of environmental, health and safety compliance.

### **Employee Concerns Program**

DEP continues to encourage free and open expression and communication of any concerns among its managers, supervisors, and employees.

The Employee Concerns Program offers a vehicle by which DEP employees may report concerns relating to EHS issues at DEP without the fear of intimidation or reprisal. Complaints have ranged from safety questions and concerns at individual facilities to employee training needs, safety equipment requests, and concerns or questions about water discharges containing regulated substances.

Employees are encouraged to communicate their concerns by a toll-free telephone number (800-897-9677) that is available to them 24 hours a day, 7 days a week. Each report of an EHS concern is investigated, and any appropriate corrective action is promptly implemented.

### **4.6 Facility Auditing**

The OEHS audit staff continues to conduct a full regulatory compliance auditing program. The primary objective of the DEP facility auditing program is to ensure that DEP facilities are in full compliance with all environmental and health and safety laws and regulations. The program is also intended to reinforce EHS employee training and to raise awareness of DEP environmental and health and safety goals. Teams composed of environmental and health and safety professionals from OEHS (using EHS-specific software) identify action items or deficiencies which facility personnel must correct in order to be in compliance with EHS regulations.

By the close of 2004, the OEHS audit team had audited or spot audited approximately 130 facilities. These audits, in conjunction with those done by Framatome and Impact had identified almost 6500 deficiencies; these were entered into the Action Item Tracking table (AIT) to which OEHS and the bureaus had real-time access. Almost 6000 of these items had been corrected by the end of 2004.

Throughout 2004, in addition to identifying regulatory compliance concerns, the facility audits provided OEHS auditors with an opportunity to gauge the effectiveness of recently implemented EHS standard operating procedures as well as other components (e.g., employee training) of the DEP Compliance Action Plan (CAP). Information obtained from the audits enabled OEHS to identify trends and patterns that proved to be useful in redirection or modification of the agency's compliance program.

In December 2004, DEP initiated an Accuracy Improvement Initiative (AII). The AII examined two areas of DEP reporting: (i) the status of closed audit action items



where DEP had reason to question that designation and (ii) the status of the implementation of CAP subject matter areas. As a result of launching this quality assurance/quality control assessment, DEP enhanced its facility auditing practices to include the following:

- an improved style of presenting audit findings and recommendations to ensure that the findings are clear, consistent, action-driven, and sufficiently detailed;
- additional steps taken at audit closing conferences to ensure that facility personnel clearly understand the audit findings and what needs to be done to correct them; auditors may provide a handwritten draft of their findings, when practicable, so that items may be addressed before a formal report is issued; and
- workshops conducted with facility personnel to explain the general auditing process, determination of audit finding priority classifications and corrective action deadlines, and how responses to action items should be written including model language that facility personnel can use for closing out typical findings.

Other EHS program developments implemented as a result of the auditing program include revision of EHS program policies and procedures to better correlate to identified bureau and facility compliance issues or concerns, and the use of monthly bureau EHS staff meetings to discuss auditing findings, reporting obligations and other compliance issues.

In 2005, we expect our audit program to continue to be our main source of recognizing facility compliance issues or problems. We also anticipate that it will maintain its dual roles of monitoring and providing information about our comprehensive EHS program and engendering discussion of ways to make it better.

#### **4.7 Spill Prevention Program**

A review of the spill incident history at DEP facilities revealed that most spills occurred because of equipment failure or human error (DEP employee/contractor) during routine job tasks. Accordingly, a spill prevention program was developed to ensure that, to the extent practicable, spills or releases of regulated substances due to Agency or contractor activities at DEP facilities would be prevented, and that the source and/or cause of any spills would be monitored to develop corrective actions designed to prevent future incidents.

Spill Prevention training to increase awareness of the types of activities that cause spills, explain Agency and Bureau requirements for reporting spills, and discuss initiatives to reduce spills has been provided to DEP employees and contractors working at DEP facilities. The Environmental Release & Reporting policy was amended to include new sections covering Product Delivery Procedures (i.e., loading/off-loading) and Spill Prevention (Spill Prevention, Environmental Release Reporting and Investigation policy).

DEP has written a Contractor Selection & Management policy to guide the Bureaus both in evaluating the past EHS performance of vendors and in writing specific EHS compliance requirements into contracts before contractors' services are engaged by DEP. In addition, language has been drafted to be added to contracts to require of vendors that they take appropriate measures to reduce the likelihood of spills.

Preventive maintenance schedules have been developed for use by BWS and BWSO employees and contractors. Practices have been instituted such as pre-use inspections of equipment, proper labeling of valves and ports transferring or receiving chemical and petroleum products, installation of secondary containment devices, and replacement of damaged or old equipment. OEHS facility audits now include an evaluation of compliance with these measures.

OEHS and the bureaus are monitoring and analyzing spill events to determine the effectiveness of the new training and preventive maintenance procedures, and to determine if additional resources or steps may be needed to reduce spills.

## **5. BUREAU ACHIEVEMENTS**

DEP has focused, over the past year, on rolling out the EHS programs to two of its largest bureaus - the Bureau of Water Supply and the Bureau of Water and Sewer Operations. Both bureaus have made tremendous strides over the past year in establishing EHS organizations and in carrying forward the EHS program as it has been rolled out.



### **5.1 Bureau of Water Supply**

DEP Bureau of Water Supply (BWS) is responsible for managing water from a network of 19 reservoirs and three controlled lakes in a 2,000 square mile watershed extending 125 miles north and west of New York City. There are three distinct watersheds that supply drinking water to the City: Croton (also referred to as the East-of-Hudson Division), and Catskill and Delaware (together referred to as the West of Hudson Division). Each Division is operated under the supervision of a Division Engineer.

Historically, EH&S activities within BWS were integrated into the Operations and Drinking Water Quality Control (DWQC) divisions of BWS. A small number of staff provided EHS support to Bureau personnel with limited resources, budgets, and equipment. In May 2001, BWS formed the Division of Regulatory Compliance and Facilities Remediation and assigned EHS personnel to the East and West of Hudson Divisions (EOH and WOH) as well as the Division of Drinking Water Quality Control.

### **Division of Regulatory Compliance and Facilities Remediation**

The chief point-of-contact for handling EHS issues within BWS is the Division of Regulatory Compliance and Facilities Remediation (DRCFR) which is staffed by 27 employees. DRCFR has primary responsibility for the development, implementation, and oversight of all BWS EHS compliance programs. The mission of the DRCFR is multi-faceted: (1) to serve as the technical resource for BWS as it achieves compliance with applicable rules and regulations regarding the environment and employee health and safety; (2) to provide emergency spill response and remediation at BWS facilities and to supervise contractors hired for hazardous waste/materials remediation and waste disposal; (3) to provide EHS training to BWS personnel; and (4) to provide compliance guidance to EHS personnel assigned to other Divisions within BWS.

### **East and West of Hudson District EHS Programs**

Each of BWS' operations divisions (*i.e.*, EOH (Croton), WOH (Catskill and Delaware) has been assigned personnel (3 to EOH, 3 to WOH) dedicated to EHS activities at its respective Division. Division EHS personnel implement many of the EHS programs developed by the Agency, conduct in-field assessments of EHS related conditions at BWS Operations facilities, respond to inquiries regarding worker health and safety issues, provide training and other information sessions to Operations staff, develop EHS programs tailored to the Division's individual needs, work with personnel from state and federal agencies, and coordinate their efforts with other BWS or DEP EHS personnel.

### **Division of Drinking Water Quality Control**

The mission of the Division of Drinking Water Quality Control (DWQC) is to ensure the quality of New York City's drinking supply. In order to accomplish this mission, DWQC performs extensive water quality monitoring and research. Given the complexities of the drinking water laboratory and field programs managed by DWQC, specialized EHS personnel have been assigned to specifically work with Division personnel, in both the watershed and the Distribution Laboratories and Field Programs. DWQC has assigned two EHS employees to cover the Watershed Laboratory and Field Operations (outside of New York City) and one employee to cover the in-City Distribution Laboratory. DWQC EHS personnel regularly interact with EHS staff from the DRCFR and East and West of Hudson Divisions



## **5.2 Bureau of Water and Sewer Operations**

BWSO's core mission is to operate, maintain and protect the City's drinking water and wastewater (sewer) collection systems. The BWSO EHS division was created in January 2002 and is staffed by 15 EHS professionals. The BWSO EHS division is responsible for overseeing EHS compliance within BWSO operations, conducting employee training, providing regulatory guidance and assistance, and conducting and responding to facility regulatory compliance audits or assessments.

In addition, BWSO has designated certain in-field facility personnel as Safety Officers. Safety Officers assist BWSO EHS staff by apprising them of concerns, providing input to and from the facilities, and providing support to BWSO EHS initiatives at the facility level. BWSO EHS staff holds monthly meetings with the Safety Officers to identify problems and provide a venue to educate Safety Officers on EHS issues and policies.

## **5.3 Other Bureaus**

Other DEP bureaus have been active participants in the development of the EHS programs and have identified bureau-specific EHS staff. As noted above, BWT employees have commenced awareness and competency training comparable to that offered to BWS and BWSO employees. In addition, staff from the BWT Compliance/Auditing Division will accompany OEHS auditors to learn how to conduct facility regulatory compliance audits.

## 5.4 Major Accomplishments

Major accomplishments within the past year of BWS and BWSO EHS staff include:

### A. PROGRAMS

#### *Bureau of Water Supply*

- **HazMat Emergency Response Program:** HazMat staff participates in activities related to hazardous materials, waste generation, remediation and emergency response. HazMat responded to approximately seventy-two (72) hazardous material emergencies within the City of New York's Watershed (many of these did not involve DEP facilities) in the past year.
- **Environmental, Health and Safety Contracts:** Regulatory Compliance Section staff have researched, written and managed seven (7) capital and expense contracts covering abatement, remediation, emergency response, medical surveillance, laboratory services, spill prevention and evacuation alarm installation. The total value of these contracts is approximately \$8.4 million.

#### *Bureau of Water and Sewer Operations*

- **Work Zone Safety:** EHS staff performed 50 Work Zone Safety evaluations in which set-up, PPE use, flagger use, and equipment availability were reviewed. Reports were distributed to the Director of Field Operations.
- **Environmental, Health and Safety Contracts:** Two (2) contracts for remediation of Groundwater Operation Facilities were bid, and work on the first one commenced in January 2005; in 2004, 90 work orders addressed removal of hazardous and non-hazardous materials and universal waste from BWSO facilities.

### B. EMPLOYEE TRAINING

#### *Bureau of Water Supply*

- **HazMat Homeland Security Training:** HazMat staff realizes that preparedness requires training and drilling. Training involves classroom and simulated field exercises that may involve hazardous materials and chemical, biological, or radiological agents. Drilling with local, state and federal agencies sharpens the skills acquired by HazMat staff during their rigorous training sessions.

- **Regulatory Compliance Section:** Through existing remediation contracts, section personnel have assisted Division EHS staff with the training of bureau employees in hazardous waste operations, emergency response and spill prevention.
- **EHS Training Section:** Section staff managed a \$250,000.00 training budget and administered the training in forty-six (46) separate subject areas. In conjunction with Consolidated Edison, the section staff coordinated the attendance of 748 employees in OSHA Awareness I classes and 832 employees in OSHA Awareness II classes. Staff also assisted the Agency's Training Section in coordinating 2-Hour Office Worker Right to Know classes for over 150 employees. In cooperation with all Bureau EHS representatives, the Bureau has trained over 750 employees on the newly implemented Emergency Action/ Fire Prevention Plans.
- **Health and Safety Section:** Health and Safety staff assisted the EHS training section by providing formal and informal tailgate safety training sessions on topics such as Crane & Hoist, PPE, Right-to-Know, Confined Space, Blood borne Pathogens, and LOTO.

#### *Bureau of Water and Sewer Operation*

- **EHS Training:** Training on the use and maintenance of PPE has been provided by EHS staff, which has also overseen respiratory protection training for all affected employees in the Respiratory Protection Program.
- **Water Plant Operator Certification:** EHS staff has had courses it provides for Water Plant Operator certification and renewal approved by NYSDOH
- **Safety Officer Training:** EHS staff has developed a 2½-day Safety Officer training that provides an introduction to policies, checklists, forms, documentation and other issues.

### **C. CAP IMPLEMENTATION**

Both bureaus continued to take critical steps toward implementing EH&S programs. These efforts included:

#### *Bureau of Water Supply*

- **Emergency Planning Policy Implementation:** DRCFR staff managed the Consultant development of over fifty (50) joint Emergency Action and Fire Prevention Plans for the Bureau's manned facilities. As of July 2004, the plans were in place and substantially implemented.



- **CAP Management:** DRCFR staff continues to act as Bureau CAP Liaison for the EOH and WOH Divisions and DWQC, gathering information and reporting the Bureau's status during monthly CAP update meetings to Agency Legal and the Compliance Officer for incorporation into the Commissioner's Monthly Progress Report submitted to the Federal Monitor.
- **HazMat Environmental Release Reporting:** HazMat and Regulatory Compliance staff upgraded the formal tracking system that is utilized to monitor and record pertinent information on the source of spills and releases by incorporating an electronic version of the Bureau's Environmental Release Report form into electronic tablet computers, which can transmit this information electronically to a centralized database.
- **Regulatory Compliance Section:** Section staff has developed specific contracts covering the installation of employee evacuation alarm systems at forty-two (42) facilities and the development of Spill Prevention, Control and Countermeasure Plans at twenty-six (26) petroleum bulk storage sites.
- **Health and Safety Section:** Over the past year, section staff continued to implement the Agency's newly developed Health and Safety programs. Program Implementation Plans ("PIPs") were developed and completed for the following programs: Bloodborne Pathogens, Control of Hazardous Energy (LOTO), Crane & Hoist Safety, Emergency Planning, Excavation & Trenching, Hearing Conservation, Personal Protective Equipment, and Respiratory Protection.

#### *Bureau of Water and Sewer Operations*

- **CBS Inspections:** Annual inspections of all aboveground chemical bulk storage tanks were completed. Any deficiencies will be resolved as part of a BEE contract change order.
- **Hearing Conservation Program:** EHS staff completed noise evaluations and identified employees to be included in the Hearing Conservation Program; staff also coordinated with COSH and EHS' medical contractor to provide audiometric testing.
- **Confined Spaces:** EHS staff identified, classified and marked with appropriate signs all Permit-Required Confined Spaces.

#### **D. EMPLOYEE COMMUNICATION**

Both bureaus have been very active in communicating EHS programs to their employees as follows:

*Bureau of Water Supply*

- **Employee Information Sessions:** Regulatory Compliance staff has assisted Division Management by participating in Employee Information Sessions covering bureau EHS contracts, new spill prevention procedures, standard operating procedures, and EHS policies recently implemented by the Agency.
- **Health and Safety Plans (HASP) and Safe Work Practices (SWPs):** To communicate potential health and safety hazards to employees, the Health and Safety section maintains and updates HASPs at fourteen BWS facilities and develops and posts Safe Work Practice procedures where necessary.

*Bureau of Water and Sewer Operations*

- **Tool Box Talks:** 10 – 15 minute tool-box talks on each of the DEP EHS programs are being developed to be delivered to employees at all facilities during 2005.
- **New Employee Orientation Program:** introduces the worker (at time of processing) to agency EHS policies and requirements of the worker's specific position; training continues at the work location (on the first day) and reviews facility-specific requirements of the policies and regulations

**E. AUDITS/CORRECTIVE ACTIONS**

The bureaus continue to work with OEHS to ensure and verify correction of audit findings made during Framatome, Impact E & S and OEHS Regulatory Compliance Audits. Notable achievements of the bureaus include the following.

*Bureau of Water Supply*

- **Audit Findings:** BWS has been subject to two (2) rounds of Framatome Assessments (Programmatic and "High Priority"), Federal Monitor Assessments (conducted by Impact E&S), and ongoing internal Compliance Audits (OEHS), and has addressed a substantial number of identified compliance action items.
- **AIT Database Development and Management:** DRCFR staff continues to assist with the fine-tuning of the AIT Database. Numerous recommendations to improve the Database have been incorporated for better data management and sharing. BWS personnel continue to manage information presented in the AIT Database and subsequently reported in the Commissioner's Monthly Progress Report (CMPR).

*Bureau of Water and Sewer Operations*

- **Follow-up Audits:** In order to ensure that action items are addressed appropriately and in a timely manner, BWSO EHS staff began performing follow-up audits during which it evaluated completion of corrective actions, performed EHS assessment, and answered any questions from facility staff. This program will also assess those facilities which may not be otherwise audited for 1½ to 3 years.

## 6. CONCLUSION

During the past year, DEP has completed putting into place and has begun to build upon a firm EHS foundation. The Agency augmented its EHS compliance program with a spill prevention initiative and has made considerable progress in implementing its Legacy Program. Moreover, the first steps have been taken towards developing a permit, inspection and compliance obligation information management system, which is anticipated to be fully functional by the end of 2005. It will allow facility personnel to track and manage their individual facility EHS regulatory recordkeeping, monitoring and reporting requirements. Similar systems are also planned (and should be functional in 2006) to allow DEP to better manage its compliance obligations for aboveground and underground storage tank systems and to manage training requirements.

In summary, 2004 has proven to be a good year for learning more about our EHS program and, as a result, developing new tools to improve it. The "Serious About Safety" awards, Pipeline EHS webpage, Employee EHS Handbook, Accuracy Improvement Initiative, and new Action Item Tracking table are all examples of new developments that will enhance the goals of the program.

During 2005, OEHS will continue to identify deficiencies in regulatory compliance, and the bureaus will continue to appropriately correct these action items. Policies and procedures will be further revised to better reflect bureau needs and practices. Implementation initiatives being undertaken by the bureaus will ensure that every employee is aware of his EHS responsibilities and will advance our goal of an effective and sustainable EHS program.