The Conduit: EH&S NEWS FOR BWSO

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NYC Department of Environmental Protection
Bureau of Water & Sewer Operations, Environmental Health & Safety

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Picture excerpted from www.abc.net

Drink NYC Tap Water!

Whether at work, after a workout, or just about any time, Americans are drinking bottled water in record numbers. *Sure*, bottled water comes in convenient containers easy to tote from home to wherever the busy individual goes, but is the extra expense of bottled water in New York City (NYC) worth it?

According to representatives from the U.S. Food and Drug Administration (FDA), consumers can depend on bottled water's safety and quality because of FDA regulations that specifically address the safety of bottled water.

There are FDA regulations set specifically for bottled water as a way to ensure that it is safe. As a result, member bottlers are selling the quality, consistent and safe product that they promise.

Over the years, the FDA has adopted the same standards for bottled water that the U.S. Environmental Protection Agency (EPA) has set for tap water. The outcome? Standards for contaminants in bottled water and tap water are very similar.

The Benefits of Tap Water in New York City...

"Some people in their municipal markets have the luxury of good water. Others do not," a representative from the FDA stated.

As residents of New York City, we are fortunate to have the luxury of a clean, plentiful, healthy, and pleasant tasting supply of water. Recently, the EPA confirmed that our tap water is among the highest-quality and best-tasting water in the world.

"Drinking NYC water is one of the most important investments you can make in our system," Commissioner Emily Lloyd stated in DEP's 2007 Drinking Water Supply and Quality Report.

"With no carbohydrates, sugar or calories, NYC water is good for your health, and particularly good for young children, who are most susceptible to obesity and other related diseases. Drinking two liters of NYC water each day will cost just $.50 a year, whereas drinking two liters of bottled water a day will cost more than $1400 a year," she continued.

Tap water has another advantage many people don't think about: It typically contains fluoride. Many communities have elected to add fluoride to drinking water to promote Continued on page 3

Chlorinated Water ONLY! ... *Please?*

Scientists tell us that *the thinning of the ozone layer*, caused by ozone depleting substances such as chlorofluorocarbons (CFCs), in the stratosphere (6-31 miles from the Earth's surface) has an adverse effect on our planet. The acrid air on a steamy summer day in NYC tells us that too much *ozone* in our lower atmosphere (0-6 miles from the Earth's surface) adds to our discomfort. So, when it comes to *ozone*, it's: Stratosphere: *More*, Atmosphere: *Less*.

Like ozone, *chlorine* is a substance that we humans need and use, but we'd prefer to keep it within certain systems and out of others. The NYC DEP adds *chlorine* to our potable water. In measured volumes, it serves as a disinfecting agent to protect us against biological agents such as Giardia, Cryptosporidium and E.coli, which can cause intestinal diseases. However, in the air, chlorine is a caustic chemical which may cause eye and skin burns, damage to air passages and even death. So, when it comes to *chlorine*, it's: Water: *Yes*, Air: *No*.

Who's responsible for *controlling chlorine* and how do they do it safely here at the NYC DEP? Like any other municipal responsibility, use of chlorine is governed by a complex set of rules, policies, job descriptions and procedures. The front line in our defense against chlorine infiltration into the air are key Reservoir Operations personnel, our Watershed Maintainers (Operators). Operators and their Supervisors perform a complex set of tasks every day. Each one requires strict adherence to various guidelines and operators are trained in a myriad of subjects,

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Picture excerpted from NYC 2007 Drinking Water Supply and Quality Report

WIN A SUBWAY GIFT CARD & DEP WATER BOTTLE!
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BUREAU OF WATER & SEWER OPERATIONS
ENVIRONMENTAL HEALTH & SAFETY DIVISION

Chlorinated Water ONLY! ...*Please?* Continued from page 1

ranging from Right-to-Know to Crane Operation to learning how to operate a Personal Chlorine Monitor so they can keep an eye on their own exposure. So, when it comes to *controlling chlorine*, it's a big ***thumbs up*** to our Operators.

There is also an important set of guidelines known as PSM/RMP to follow. These acronyms stand for an OSHA regulation, Process Safety Management, and an EPA rule, Risk Management Program, which are similar in intent and content. Both seek to have responsible parties, such as the DEP, control hazardous chemicals that are used in large quantities in their facilities; in our case— chlorine in our upstate and downstate water treatment plants. These rules seek to ensure that chemicals are handled properly, and that employees and the public are protected from exposure. Besides Operators and Supervisors, many DEP people are involved in managing our processes safely. So many DEP people play a role in PSM/RMP success: The Commissioner, Deputy Commissioner, Chief Operator, OEHSC members, BEHS personnel, and Reservoir Operations Health and Safety personnel. Together they all help keep the chlorine in the water and out of the air.

Love Canal: *Catalyst for Environmental Awareness*

Picture excerpted from www.epa.gov/superfund

If you're from the New York area, chances are you've heard of the infamous Love Canal disaster that unfolded upstate in the late 1970s. Love Canal was a neighborhood located in Niagara Falls, which had been built on land previously owned by the Hooker Chemical and Plastics Company. Hooker had used the land exclusively as a ***dump site*** for ***hazardous wastes*** they generated as a result of chemical manufacturing. Between 1942 and 1952, Hooker buried nearly 21,000 tons (46 million lbs.) of hazardous waste in an area one mile long, 15 feet wide and 10 feet deep. In the mid-1950s, forced with threats of Eminent Domain, Hooker hesitantly sold the land to the local school board for $1. In the agreement, Hooker included a caveat explaining the dangers of the land, and stating that the buyer would assume all subsequent risks and liabilities associated with the land. Over the next 20 years, a middle-class neighborhood would be built on the land preceding serious consequences.

What followed was a series of follies by the local government. First, dirt was removed from above the dump to provide for the building of a school. Some of the cement cap was also removed, allowing rain to seep in. The school became the first in the area without a basement, for obvious reasons. Later, the city constructed a sewer line that penetrated a few of the cement walls. Surrounding the lines was *permeable* gravel. In 1960, a storm drain was put in place that pierced the wall of the covering. The punctures allowed any and all chemicals to be able to be swept away with the rain water into surrounding lakes, rivers, and wells. As the area's population density increased, pressure was put upon the city government to sell the land for development, which is exactly what happened in the later 1960's.

Following record rainfalls in the spring of 1977, wastes began leaching upward into homeowners' backyards and basements. Actual waste drums were exposed in yards, and worst of all, children would return from play with chemical burns on their hands and faces. In addition to a high rate of miscarriages, statistics show that 56% of children born in Love Canal between 1974 and 1978 had *birth defects*. On August 7, 1978, President Jimmy Carter declared a Federal Emergency at Love Canal.

In response to the Love Canal disaster, Congress established the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as Superfund. Enacted on December 11, 1980, Superfund had 3 main goals:

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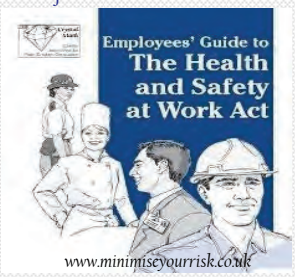
What's So Important About Occupational Injury and Illness Recordkeeping?

Part 2 in a 3 Part Series on Injury Recordkeeping and Investigation

It is always unfortunate when an employee is injured or becomes sick while on the job. Along with taking steps to prevent the incident from repeating, the **Public Employee Safety and Health Act** requires employers to keep records of work-related injuries and illnesses.



www.minimiseyourrisk.co.uk

Recording injuries requires the:

- PESH Form **SH900.2:** Injury and Illness Incident Report;
- PESH Form **SH900:** Log of Work Related Injuries and Illnesses; and
- PESH Form **SH900.1:** Summary of Work Related Injuries and Illnesses.

The Public Employee Safety and Health Bureau states the employer must fill out the **SH900.2** Injury and Illness Incident Report and **SH900** Log of Work Related Injuries and Illnesses within **7** calendar days of receiving information that a ***recordable*** injury or illness has occurred.

How do I know when an injury or illness is recordable?

The 3 key criteria are:

(1) The incident which causes or contributes to an injury or aggravates a pre-existing condition must be work-related;

(2) Must be a new case, which means the employee hasn't had a recordable injury or illness of the same type to the same body part; and

(3) The employer must consider if the injury or illness meets the general recording criteria if the injury or illness results in any of the following: ***death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness.*** Keep in mind that medical treatment does not include:

- Visits to a physician or other licensed health care professional solely for observation or counseling;
- The conduct of diagnostic procedures, such as x-rays and blood tests; and
- Using a nonprescription medication.

Forms must be kept for **5** years. If, during the 5-year period, there is a change in the extent and outcome of an injury or illness which affects the entries in the **SH900 Log (columns G – M)**, the form should be updated as necessary.

The **SH900.1 Summary of Work Related Injuries and Illnesses** is a summary of all the recorded injuries and illnesses that have occurred

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in the last calendar year and must be posted from February to April.

DEP's goal is to *prevent* injuries from re-occurring. If you feel that equipment, procedures or current work practices are contributing factors to any injury (recordable or not), you should consult with your EHS contact for a more thorough evaluation.

If you have any questions about injury and illness recordkeeping, please contact Slava Repik, Environmental Health and Safety Specialist at X5687.

Drink NYC Tap Water!

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strong teeth and prevent tooth decay in residents.

Tap water is also good for the environment! An estimated 47 million gallons of fossil fuels are used in the production of plastic bottles. This does not count the millions of gallons of diesel fuel burned by trucks that are transporting bottled water from bottlers to consumer markets.

As Americans, we are free to make our own choices. As New Yorkers, we hope that you will remember this information and the impact on your wallet, the next time you are choosing between bottled and NYC tap water.

Upcoming Training

1. National Incident Management System (NIMS)
2. Excavation Safety
3. Asbestos Awareness
4. Traffic Workzone

Questions? Contact Nelson Leon x5544

What's Hazardous Waste?

The U.S. Environmental Protection Agency (EPA) states simply that, *"Hazardous waste is a waste with properties that make it dangerous or potentially harmful to human health or the environment."* If a hazardous waste is not properly disposed of, the consequences can be devastating. A mismanaged hazardous waste could potentially cause cancer and/or birth defects, life threatening fires and explosions and toxic pollutants to enter our waterways. To streamline hazardous waste management the EPA has broken characteristic hazardous wastes into four very specific waste properties: ***flammability***, ***toxicity***, ***corrosivity*** and ***reactivity***. If you would like more information on hazardous waste identification, reference the DEP Hazardous Waste Identification Policy or 40 CFR 261 and 6 NYCRR 371.

Where does hazardous waste come from? There are tons of chemicals produced annually that are officially classified by the U.S. Government as hazardous. Hazardous chemicals are constituents of products we use on a daily basis both at home and at work. Although these products may require caution when being used, they have been proven to be very beneficial and have practical uses in our daily lives. The same properties that might make a great cleaning product may also make a hazardous waste when certain chemicals or products are no longer useable, discarded or abandoned. Some examples of hazardous wastes generated in the common household include **oil-based paint**, **gasoline**, **pesticides** and **some cleaning chemicals**.

According to the EPA, *"The average home at any one time can accumulate as much as 100 pounds of hazardous waste in basements, garages, under the sink, and in storage closets."* Many of our DEP facilities also generate hazardous wastes such as used solvents, paints, gasoline and corrosive liquids. It is important to note that many of the wastes generated at our DEP facilities could be the same as those we would find in our own homes.

How do we dispose of it? Unfortunately many of the hazardous chemicals or products that we use on a regular basis may become so common to us that we are in danger of disposing of them carelessly. In 1976, the **Resource Conservation and Recovery Act** (RCRA) was enacted in part to control the potential hazards to human health and the environment resulting from certain mismanaged waste. This legislation gave the EPA the authority to control hazardous waste from 'cradle to grave' and to provide specific guidelines regarding hazardous waste disposal for commercial, industrial and government entities. However, individual homeowners who may have the same wastes under the kitchen sink are not addressed in this legislation. EHS provides assistance to each of our DEP facilities to ensure proper disposal, therefore achieving RCRA compliance and diminishing the potential harm to human health and the environment, but what can you do in your own home? There is a wealth of information available at the NYC Department of Sanitation (DOS) website, http://www.nyc.gov/html/dsny/html/home/home.shtml.

Congratulations to:

Brooklyn South Sewer
Hillview Reservoir
Leak Detection
Manhattan Water
& Queens South Sewer

for achieving a high level of EH&S compliance and for their

OUTSTANDING PERFORMANCE*

at their

OEHSC EHS AUDITS

*Based on a comparison of their two most recent audits resulting in a 50% or more reduction of their total findings.

Honorable mention to:

Night Operations**

** Based on maintaining their total number of audit findings at 3 or less.

ENVIRONMENTAL SCRAMBLE

ROIMANTNLEVEN

E_____

WERATOSRTM

S_____

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R_____

AUDAHSORZ

H_____

ISEOPCLI

P_____

Love Canal: *Catalyst for Environmental Awareness* Continued from page 2

1. **The creation of prohibitions and requirements relating to abandoned or uncontrolled hazardous waste sites.**
2. **To provide strict liability to persons, past and present, responsible for releasing hazardous wastes at sites.**
3. **The creation of a trust fund which provided Federal funding for cleanup of sites in which no responsible parties could be identified. In order to generate funds, a tax was created on the chemical and petroleum industry which brought in $1.6 billion over the next five years.**

Superfund provides two types of responses, removal and remediation. Removal actions address releases or threatened releases of hazardous substances into the environment. Removal actions are short term responses usually relating to hazardous releases onto surface soils and/or waters, and abandoned waste drums. Remediation actions aim to permanently reduce risks linked to hazardous releases. Remediation is typically an expensive, long-term response to areas that have been impacted by hazardous contamination over the course of many years.

In 1986, amendments were made to Superfund. In addition to allocating more money to the fund, Congress gave individual states the authority to oversee Superfund sites located within their boundaries. As of 2008, there are currently 1,240 sites listed on the Superfund National Priorities List, 86 of which are located in New York State.

NYC Department of Environmental Protection

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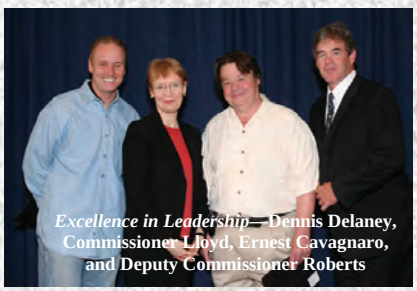
The First Annual NYC DEP Awards Ceremony Honoring Excellence in:

Leadership, Integrity, and Environmental Health and Safety



Excellence in Leadership— Dennis Delaney, Commissioner Lloyd, Ernest Cavagnaro, and Deputy Commissioner Roberts

Outstanding Work Performance

Deputy Commissioner Roberts

Commissioner's Award

Excellence in Leadership
Ernest Cavagnaro
Dennis Delaney
Michael Sasko

Outstanding Work Performance
Steve Amalfitano
Joseph Amaniera
Nick Barbaro
Marc Blaise
William Borfitz
Rebron Brathwaite
Tracy Burnett
John Caccavale
John Callies
Paul Defazio
James Donahue
Brett Elk
Randy Ellingson
Peter Galante
Vincent Gesuele
Anthony Gioia
Herman Hatcher
Jacqueline Hincapie
Virginia Kachurovsky
Joseph Kazemi
William Kreth
Christopher Labriolla
Jenny Lai
Salvatore Lorocca
Elena Leon
Taveesak Limratana
John Lobello
Michael Marino
Kevin McElynn
Thomas McTigue
Mike Mitts
Bobby Musliwala
Ray Navarro
Mike Negron
Saurin Parikh
Anthony Parrinello
Ketul Patel
Charles Polizzano
Steve Popich
Charlton Puertas
Brendan Quigley
David Ramia
James Rossi
Tarlock Sahansra
Lal Sarju
Greg Sass
William Satterfield
Joseph Scarlotta
Fred Schneider
Andrea Shivcharran
Thomas Soriano
Mark Stettner
Gerard Tangredi
Milton Velez
Melissa Whitley

Commissioner's Award
Mahsa Abroosi
Rudy Baichulall
James Branch
Tim Burke
John Byrne
Shawn Francois
John Iannucelli
Andrew Kuchynsky
Michael Kulishevsky
Dennis McDermott
Lomesh Patel
Allan Pawelsky
Ray Pollio
Miguel Quito
Andy Rousseau
Mark Safari
Deborah Siegel
Peter Spies
Thomas Tengelsen
John Zollo

"DEP's Annual Awards Ceremony Honoring Excellence in Leadership, Integrity and Environmental Health and Safety will be an annual event, which together with the employee recognition day ceremony will offer two occasions to celebrate DEP staff for the outstanding work they do. A key component of this program is our Health and Safety Awards: Eyes on Environmental Awareness and Serious about Safety, in addition to Bureau awards for Innovation, Leadership, Outstanding Work Performance, and a Commissioner's Award. These awards recognize the outstanding work of DEP employees who dedicate their careers to serving the fundamental needs of eight million residents of New York City and a million more people in other parts of New York State." – ***Commissioner Emily Lloyd****, Thursday, June 19th, 2008*

TAKE THIS QUIZ: THE FIRST THREE PEOPLE TO SUBMIT CORRECT ANSWERS WILL WIN A FREE SUBWAY GIFT CARDS & DEP WATER BOTTLE!
BE SURE TO INCLUDE YOUR FULL NAME AND WORK ADDRESS. FAX: (718) 595-5541 OR EMAIL:BWSOEHS_suggestions@dep.nyc.gov

1) According to RCRA, there are ___ types of listed Hazardous waste.
a) Four: F, K, M, P
b) Five: F, K, M, P, U
c) Four: F, K, P, U
d) Three: F, K, U

2) Which of the following is NOT a Hazardous waste in New York State?
a) Oily water from a manhole containing 65 ppm PCBs
b) An old container of paint thinner with a flashpoint of 110°F, kept on the maintenance room shelf for years, which no one will ever use.
c) Small amount of diluted Clorox bleach with a pH of 13.5
d) Municipal wastewater treatment sludge from the Newtown Creek wastewater treatment plant

3) An appropriate example of preventing pollution is:
a) Recycling used motor oil
b) Disposing of municipal waste by incineration
c) Washing waste mercury from a broken thermometer down the drain
d) All of the above

4) According to the NYC Drinking Water Supply and Quality Report for 2007, 99% of our water supply came from the _____.
a) Reservoir basin in Rockland county
b) Croton System
c) Catskill/Delaware System
d) Groundwater System

Answers for June 2008 Newsletter Quiz: 1) C 2) C 3) B 4) D