



Environmental & Occupational Health and Safety Newsletter



Message from the Commissioner

Every day DEP provides the people of New York City and the upstate communities with safe and clean drinking water. DEP's environmental health and safety program was designed to ensure that the equipment and materials we use in providing, distributing, and treating water also protect our fellow workers, communities, and the environment around us. As an agency charged with upholding the public's trust, we must be committed to informing and educating all our staff about environmental, health and safety laws. We must also encourage our partners - vendors, contractors, suppli-

ers and the general public - to promote environmental awareness and protection.

We work for a truly wonderful agency - an agency that has built one of the most impressive water systems in the world. In order to ensure this system continues to operate safely for generations to come, we must be committed to instituting comprehensive environmental, health and safety policies and practices. Working together towards this goal, I know we can make this agency even safer and stronger.



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Volume 1, Issue 1

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Message from the Agency Compliance Officer



Hello, my name is Gerould J. McCoy and I am DEP's Agency Compliance Officer for Environmental, Health & Safety. I would first like to say that I am pleased to join this very talented group of men and women that make up our Agency and who provide New Yorkers with good, safe drinking water each day. You should be proud of your efforts because it is deserved and they are appreciated.

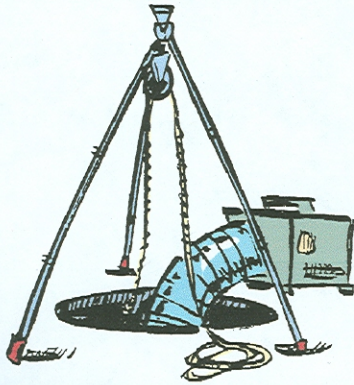
As some of you may know, in the past, we have had serious problems in complying with certain environmental, health and safety laws while providing good, high-quality water. Commissioner Ward and my office are developing an enhanced compliance program that includes written operating procedures, providing more employee training, establishing Bureau-level environmental, health & safety (EHS) personnel and purchasing new equipment to give you the knowledge, skills, and assistance necessary to do your jobs while complying with

the applicable environmental, safety & health requirements. Also, in the next couple of months, we will introduce an Employee Concerns Hotline so that in addition to speaking to your supervisor or Bureau EHS staff, you can anonymously contact us by telephone with your environmental, health & safety questions or issues. These are just a few of the ways we plan to take on the challenge of increasing environmental health & safety awareness in our agency.

You can contribute toward developing our new compliance program, just by helping name this newsletter. This is OUR newsletter, so give us your good suggestions, and tell us how you'd like to see it named! We'll announce the winning name and the contributor in the next edition of the newsletter. Again, I'm glad to be a part of this fine organization and look forward to working with you.

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Permit-Required Confined Space



A confined space is a space that has limited access or restricted means of entry or exit; is large enough for an employee to enter and perform assigned work; and is not designed for continuous occupancy. Many bu-

reaus/facilities have various types of confined spaces and it is the policy of DEP to comply with all regulations pertaining to confined spaces. These spaces have the potential to be dangerous for many reasons. They can be poorly ventilated, causing an accumulation of toxic gases, hazardous airborne substance or a lack of oxygen. They can have moving equipment, slippery or dangerous surfaces, electric shock hazards, falling objects, water or other liquids contents, chemical or extreme temperatures. Noise, poor visibility or shifting materials such as grain or sand could be present. Once a confined space poses or has the potential for safety and health hazards it is defined as a permit required confined space.

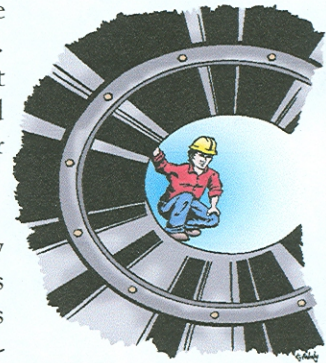
Never enter a confined space without training.

The Office of Environmental, Health and Safety Compliance in collaboration with Health and Safety Coordination Committee and Framatome ANP has established new written procedures to protect DEP employees from the hazards of working in confined spaces and to comply with OSHA standard 29 CFR 1910.146 (Permit-Required Confined Space). The procedures include provisions for confined space evaluation and classification, training for employees who are required to enter spaces, hazard identification and control, entry permit system and rescue procedures.

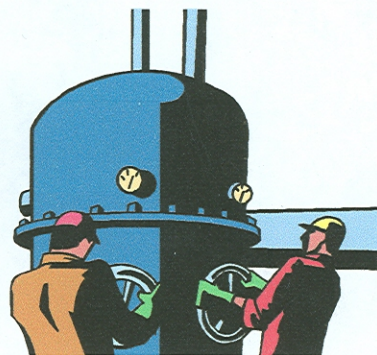
Supervisors must ensure that these procedures are followed and only NYCDEP authorized employees who are trained and qualified are assigned duties for permit required confined spaces.

The written procedures define the following precautions for permit required confined space entry.

- ❑ The atmosphere should be tested in accordance with DEP's air monitoring requirements before the assigned employee enters the permit required confined spaces.
- ❑ If ventilation is required, the space should be ventilated until it tests safe. If not possible, the right respiratory protection should be worn.
- ❑ When purging is required, inert gas should be pumped into the confined space to replace the hazardous atmosphere with breathable air. Pure oxygen should not be used since it could contribute to a fire or explosion.
- ❑ For lock out energy sources such as lines carrying gases, liquids or solid should be disconnected or blocked off before an employee enters. Valves and electrical circuits should be locked out and tagged.



- ❑ All possible sources of ignition should be removed. Use non-sparking tools and lighting devices in a potentially flammable atmosphere. Barricade the area if ventilation or rescue equipment will interfere with traffic.
- ❑ An employee must be prepared before entry into a permit required confined space. The required Personal Protective Equipment (PPE) including hard-hat, safety-toed footwear, gloves and breathing apparatus must be worn, including a lifeline that is connected from the body and harness to a winch outside the confined entrance so the employee can be pulled out in case of emergency.



- ❑ Finally, at least one trained and equipped person must be placed outside of the confined space, for communication and rescue if necessary.

Environmental Incident Reporting and Investigation Program

On August 22, 2002, the Environmental Coordination Committee and the Office of Environmental, Health and Safety formally approved the Environmental Incident Reporting and Investigation Program, which were developed by Framatome ANP in conjunction with NYCDEP Environmental Health and Safety (EHS) staff. The purpose of this Program is to ensure that all incidents that result in the release of a petroleum product, a chemical or hazardous substance are properly reported, both within the NYCDEP and to appropriate regulatory agencies. The procedure also defines NYCDEP's spill/release documentation and investigation requirements.



Any NYCDEP employee who becomes aware of any spill or release of chemical or petroleum products or wastes (with the exception of incidental releases of bulk chemicals or minor releases of petroleum products) must immediately notify: (1) Supervisors or co-workers

Employee(s) who become aware of any spill or release of chemical or petroleum products or wastes must immediately make notification

if they may be in immediate danger, (2) Emergency 911 (or local police or responders if no 911 services is available) if the incident presents an obvious danger to NYCDEP employees or the public, and (3) the Responsible Manager or highest ranking Supervisor on duty regardless of the size of the release or whether it is inside a containment area. Contract workers must also notify their Supervisor, who in turn must notify NYCDEP's Project Engineer or Manager and Responsible Manager or highest-ranking Supervisor.



The Facility's Responsible Manager must then inform either the DEP 24-Hour Call Center for In-City incidents or the DEP Police, Croton Precinct Command Center ("CC"), for incidents in the City's Upstate Wa-

tershed. In the case of notifications from outside agencies, the DEP Police and/or In-City Call Center will immediately contact the appropriate (BWS or In-City) Hazardous Materials Response Team ("HMRT") with all relevant information.

The On-Call staff from each Bureau's EHS Group is responsible for providing technical support to assess the release, confirm that notifications have been made to outside regulatory agencies and NYCDEP Management, prepare written reports, and participate in incident investigations after the initial notifications and necessary emergency response is completed.

The Investigation, comprises of several sections: (1) a detailed description of the spill or release, (2) a determination of the contributing factors of the incident, and (3) recommendations to prevent similar incidents in the future. A four-part Environmental Release Report will be utilized to cover initial notification (Part 1), the investigation (Part 2), corrective action (Part 3) and closeout (Part 4) (which is signed by the respective Division Director).

Comments/Suggestion

Do you have an idea for an Environmental, Health and Safety article?
Would you like to see a particular Environmental, Health and Safety topic featured?
Fax or mail us your suggestions.

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Comment/Suggestion:

Cold Weather and Outdoor Work

With temperatures across the country at or near record lows, the Occupational Safety and Health Administration (OSHA) is issuing reminders to workers and employers to take necessary precautions. Workers exposed to the elements (i.e. construction, commercial fishing, maritime, agriculture, etc.) are among those who need to take precautions.

Prolonged exposure to freezing or cold temperatures can result in serious health problems such as trench foot, frostbite and hypothermia. In extreme cases, including cold water immersion, exposure can result in death. Danger signs include uncontrolled shivering, slurred speech, clumsy movements, fatigue and confused behavior. If these signs are observed, call for emergency help.

OSHA's Cold Stress Card provides a quick reference guide and recommendations. Available in English and Spanish, this laminated fold-up card is being distributed to DEP Field employees.

Among the tips:

** Recognize environmental and workplace conditions that can be dangerous.

** Learn the signs and symptoms of cold-induced illnesses/injuries and what to do to help workers.



** Inform workers about cold-induced illnesses and injuries.

** Workers should wear proper clothing for cold, wet and windy conditions including layers so they can adjust to changing conditions.

** Taking frequent short breaks in warm dry shelters allows the body to warm up.

** Try to schedule work for the warmest part of the day.

** Avoid exhaustion or fatigue because energy is needed to keep muscles warm.

** Use the buddy system - when possible work in pairs so that one worker can recognize danger signs.

** Drink warm, sweet beverages (sugar water, sports-type drinks) and avoid drinks with caffeine (coffee, tea, sodas or hot chocolate) or alcohol.

** Eat warm, high-calorie foods such as hot pasta dishes.

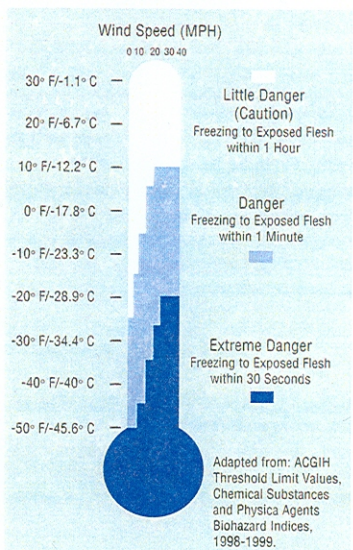
** Remember, workers face increased risks when they take certain medications, are in poor physical condition or suffer from illnesses such as diabetes, hypertension or cardiovascular disease.

OSHA is dedicated to saving lives, preventing injuries and illnesses, and protecting America's workers. Safety and health add value to business, the workplace and life.

THE COLD STRESS EQUATION

**LOW TEMPERATURE + WIND SPEED + WETNESS
= INJURIES & ILLNESS**

When the body is unable to warm itself, serious cold related illnesses and injuries may occur, and permanent tissue damage and death may result. Hypothermia can occur when *land temperatures are above freezing or water temperatures are below 98.6°F/37°C*. Cold related illnesses can slowly overcome a person who has been chilled by low temperatures, brisk winds, or wet clothing.



U.S. Department of Labor
Occupational Safety and Health Administration
OSHA 3156
1998

FROST BITE

What Happens to the Body:

FREEZING IN DEEP LAYERS OF SKIN AND TISSUE; PALE, WAXY-WHITE SKIN COLOR; SKIN BECOMES HARD and NUMB; USUALLY AFFECTS THE FINGERS, HANDS, TOES, FEET, EARS, and NOSE.

What Should Be Done: (land temperatures)

- Move the person to a warm dry area. Don't leave the person alone.
- Remove any wet or tight clothing that may cut off blood flow to the affected area.
- DO NOT rub the affected area, because rubbing causes damage to the skin and tissue.
- Gently place the affected area in a warm (105°F) water bath and monitor the water temperature to slowly warm the tissue. Don't pour warm water directly on the affected area because it will warm the tissue too fast causing tissue damage. Warming takes about 25-40 minutes.
- After the affected area has been warmed, it may become puffy and blister. The affected area may have a burning feeling or numbness. When normal feeling, movement, and skin color have returned, the affected area should be dried and wrapped to keep it warm. NOTE: If there is a chance the affected area may get cold again, do not warm the skin. If the skin is warmed and then becomes cold again, it will cause severe tissue damage.
- Seek medical attention as soon as possible.



Environmental, Health and Safety Audits

Environmental and workplace safety depends on every DEP worker taking ownership for finding and reporting hazards.

Here are some things to check around your work area:

- ❁ Is the area free of material which could cause someone to trip? Walkways and work areas should be free of stored materials, scrap and other debris.
- ❁ Is the work area cleaned up regularly? Debris should be removed continually, or at least as each task ends.
- ❁ Is emergency equipment readily available? Keep an eye on fire extinguishers, emergency exits and sprinklers to see they are not blocked by materials.
- ❁ Are cords and cables routed away



from foot traffic areas? This is important to prevent tripping accidents as well as to prevent damage to the equipment.

- ❁ Are light fixtures maintained so there is adequate light to work safely and effectively? Burned out bulbs and tubes should be replaced promptly.
- ❁ Are hazardous materials correctly labeled and stored where they cannot ignite or contact

workers? Are the Material Safety Data Sheets (MSDS) easily accessible by workers and emergency personnel?

- ❁ Are tools and equipment maintained according to the manufacturer's instructions? Malfunctioning equipment and worn or damaged tools can cause serious accidents.
- ❁ Is ventilation equipment working properly to remove dust, fumes and other respiratory hazards?

Take responsibility for the conditions in your workplace. Watch for and report any hazardous conditions to your supervisor or EHS staff so they can be corrected – after all, it's your safety at risk.

Lets all try to develop an auditor attitude!

HYPOTHERMIA - (Medical Emergency)

What Happens to the Body:

NORMAL BODY TEMPERATURE (98.6°F/37°C) DROPS TO OR BELOW 95°F (35°C); FATIGUE OR DROWSINESS; UNCONTROLLED SHIVERING; COOL BLuish SKIN; SLURRED SPEECH; CLUMSY MOVEMENTS; IRRITABLE, IRRATIONAL OR CONFUSED BEHAVIOR.

What Should Be Done: (land temperatures)

- Call for emergency help (i.e., Ambulance or Call 911).
- Move the person to a warm, dry area. Don't leave the person alone. Remove any wet clothing and replace with warm, dry clothing or wrap the person in blankets.
- Have the person drink warm, sweet drinks (sugar water or sports-type drinks) if they are alert. **Avoid drinks with caffeine** (coffee, tea, or hot chocolate) or alcohol.
- Have the person move their arms and legs to create muscle heat. If they are unable to do this, place warm bottles or hot packs in the arm pits, groin, neck, and head areas. **DO NOT** rub the person's body or place them in warm water bath. This may stop their heart.

What Should Be Done: (water temperatures)

- Call for emergency help (Ambulance or Call 911). Body heat is lost up to 25 times faster in water.
- **DO NOT** remove any clothing. Button, buckle, zip, and tighten any collars, cuffs, shoes, and hoods because the layer of trapped water closest to the body provides a layer of insulation that slows the loss of heat. Keep the head out of the water and put on a hat or hood.
- Get out of the water as quickly as possible or climb on anything floating. **DO NOT** attempt to swim unless a floating object or another person can be reached because swimming or other physical activity uses the body's heat and reduces survival time by about 50 percent.
- If getting out of the water is not possible, wait quietly and conserve body heat by folding arms across the chest, keeping thighs together, bending knees, and crossing ankles. If another person is in the water, huddle together with chests held closely.

How to Protect Workers

- Recognize the environmental and workplace conditions that lead to potential cold-induced illnesses and injuries.
- Learn the signs and symptoms of cold-induced illnesses/injuries and what to do to help the worker.
- Train the workforce about cold-induced illnesses and injuries.
- Select proper clothing for cold, wet, and windy conditions. Layer clothing to adjust to changing environmental temperatures. Wear a hat and gloves, in addition to underwear that will keep water away from the skin (polypropylene).
- Take frequent short breaks in warm dry shelters to allow the body to warm up.
- Perform work during the warmest part of the day.
- Avoid exhaustion or fatigue because energy is needed to keep muscles warm.
- Use the buddy system (work in pairs).
- Drink warm, sweet beverages (sugar water, sports-type drinks). Avoid drinks with caffeine (coffee, tea, or hot chocolate) or alcohol.
- Eat warm, high-calorie foods like hot pasta dishes.

Workers Are at Increased Risk When...

- They have predisposing health conditions such as cardiovascular disease, diabetes, and hypertension.
- They take certain medication (check with your doctor, nurse, or pharmacy and ask if any medicines you are taking affect you while working in cold environments).
- They are in poor physical condition, have a poor diet, or are older.

Wellness—It's Cold and Flu Season

That scratchy throat, the sneeze and sniffle — you've caught another cold or the flu. It's not the first in your life and it won't be the last.

You're in for a few days or even a couple of weeks of discomfort and inconvenience. Here are some tips for avoiding these contagious illnesses:

> Wash your hands often. The viruses that spread colds can be transmitted by contact such as shaking hands or touching a surface that an infected person has touched — such as a doorknob or a telephone.

> Keep your hands away from your face.



Without realizing it, you probably touch your eyes, nose and mouth many times a day with your hands. This is how the virus can get from your hands into your respiratory tract.

> Maintain your health to keep your immune system in good shape. Eat a variety of fruits and vegetables, exercise regularly, get plenty of rest and drink at least eight glasses of water a day.

> Talk to your doctor about a flu shot if you are over 60, have a chronic illness or just want to decrease your chances of getting the flu.

> Cover your mouth and nose when you cough or sneeze to keep from spreading the infection to others. Dispose of tissues where others will not contact them, and wash your hands frequently when you have a cold or the flu. What's the difference be-



tween a cold and the flu? If you just have the runny nose and sneezing, you probably have a cold. If you also have a fever, headache, muscle aches and fatigue, you probably have the flu.

You can usually care for yourself until you get over a cold or the flu. Drink plenty of fluids, get plenty of rest and eat nutritious foods.

Persons who are very young or old, pregnant or suffering from allergies may need medical help.

You should also call a doctor if you have one or more of these symptoms:

> If you are sick for more than a week.

- > If you have a high fever.
- > If you are coughing up mucous which is not clear.
- > If you have a sore throat that hurts when you swallow and have white patches on the tongue.
- > If you have chest pains, shortness of breath, wheezing, a bad earache or headache for more than a couple of days.

If you take over-the-counter remedies to relieve cold or flu symptoms, be aware many of them can cause drowsiness, making it unsafe to drive or operate machinery. Also, many can affect other medications that you may be already taking.

Perhaps one day medical science will come up with a way to cure the common colds and flu. In the meantime, a healthy lifestyle will help decrease your chances of becoming infected and will help to speed your recovery.

New Recordkeeping Rules

The New York State, Department of Labor (DOL) has adopted a new regulation, which replaced Part 801-Recording and Reporting Public Employees Occupational Injuries and Illnesses. In order to comply with the changes, DOL's Public Employee Safety and Health Bureau (PESH) helped modified the forms used for reporting under this regulation. Training sessions were held by PESH in November 2002 to have DEP staff acquaint themselves with the use of the new forms and understand the requirements of the revised recordkeeping rule.

The new DOL Form SH 900 - *Log of Work Related Injuries and Illnesses* has been simplified. SH 900.1 - *Summary of Work Related Injuries and Illnesses* provides additional data making it

easier for DEP to calculate incidence rates. SH 900.2 - *Injury and Illness Incident Report* includes more data about how the injury or illness occurred.

These forms have nothing to do with Worker Compensation and should not be submitted as a part of any benefits package.

All staff for Bureaus/Offices who are responsible for keeping records on work-related deaths, injuries and illnesses are urged to become familiar with the new rule, which is mandatory for use since January 1, 2002.



Personal Protective Equipment (PPE)

OSHA requires the use of personal protective equipment (PPE) to reduce exposures to hazards when engineering and administrative controls are not feasible or effective in reducing exposures to acceptable levels. DEP is required to determine exposures to hazards within our facilities and determine if PPE should be used.

If PPE is to be used to reduce exposure to hazards, a PPE program is required. The Office of Environmental, Health and Safety Compliance in collaboration with the Health and Safety Coordination Committee and Framatome ANP recently developed a new Personal Protective Equipment Policy in December 2002.

This program will be used to identify and evaluate hazards in the DEP workplace and determine if PPE is an appropriate control measure. If PPE is to be used, this program will determine how it is selected.



Here are a few examples of PPE:

Head Protection - appropriate head protection is worn where there is a danger of impact to the head from falling objects and overhead obstructions. Special hardhats may also be required to provide some protection against electrical shock. Operators of heavy equipment or forklifts at warehouses are just some of the workers who need special head gear.

Hand Protection - appropriate hand protection is used when hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts, or lacerations; severe abrasions; puncture; chemical burns; thermal burns; and harmful temperatures.

Generally speaking, gloves, loose clothing or jewelry should not be worn around rotating machinery because of the danger of entanglement.

Foot Protection - appropriate foot protection is worn in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where feet are exposed to electrical hazards. Chemical resistant, steel-toed or shanked foot guards/shoes, slip resistant soles, and waders are some examples of this type of protective device.

In addition to foot guards and safety shoes, leggings (e.g., leather, aluminized rayon, or other appropriate material) can help prevent injuries by protecting employees from hazards

Eye and Face Protection - appropriate eye and face protection is worn to provide protection against impact from flying objects, dust, chemicals, radiation and other hazards. Goggles, eyewear with side protectors and face shields are some examples of this type of protective device.

Hearing protection - such as ear plugs, canal caps and earmuffs are needed in noisy work environments. They are worn to protect against noise from heavy equipment and other sources.

Respiratory Protection - appropriate respiratory protection is worn to provide protection from breathing air contaminated with harmful dusts or gases. Respirators are required for working in hazardous atmospheres. Cartridge and supplied air are some examples of this type of protective device.



Clothing made of chemically resistant materials is required for handling certain substances. In some instances working around flammable liquids may require clothing made of materials to minimize the buildup of static electricity. This gear can include gloves, aprons, eyewear, coveralls and other kinds of protective wear. Protective clothing must be of the correct material to protect against the specific hazard.

Shirts with long sleeves may be required. Pants without cuffs may be needed to prevent tripping accidents.

Jobs around bodies of water and other liquids may require **Personal Flotation Devices** to be worn to prevent drowning.

Fall Protection - appropriate fall protection is needed whenever work is conducted on a surface six feet or greater above a lower level without guardrails or safety nets.

A job hazard analysis is often required to determine what type of PPE is appropriate for the job task. PPE does not eliminate the hazard. If the equipment fails, exposure will occur. To reduce the possibility of failure, equipment must be properly fitted and maintained in a clean and useable condition.

Instructions in the proper use of PPE, their maintenance and how to inspect them will be provided in the coming months.

OEHSC

The Office of Environmental, Health and Safety Compliance (OEHSC) has been established to coordinate and enhance agency-wide environmental and occupational health and safety management activities. Its mission is to provide support and direction in complying with relevant federal, state, and local standards, guidelines, and regulations as well as monitor the effectiveness of agency-wide environmental, health and safety policies.

The goal of the Office of Environmental, Health and Safety Compliance is to promote pro-active compliance strategies through the preparation and revision of procedures, programs, and employee training (specifically tailored to agency operations) while assessing hazards, preventing violations, and maintaining safe and sensible work practices.



EHS Contacts

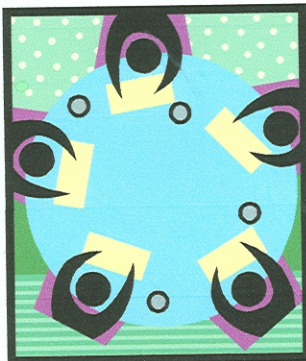
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Newsletter Contest



This newsletter needs a name. If you have a suggestion for a great name for this publication you could win this contest.

Suggestions along with your name, Bureau and worksite location should be sent by **April 25, 2003**, to the:

Office of Environmental, Health and Safety Compliance, 59-17 Junction Blvd., 10th floor, Flushing, NY 11373 or Fax to (718) 595-5546 Attn: C. Richardson or e-mailed to crichardson@nyc.dep.gov.

The employee with the winning submission will receive a DEP "Goodies Bag" containing a variety of items with the DEP logo. Honorable mentions will be published in the next issue.