



V.I.E.W.S.

VIEWS & INFORMATION ON ENVIRONMENTAL AND WORKPLACE



TRAFFIC WORK ZONE SAFETY

Who hasn't seen roads where maintenance or repair is being carried out either to the roads or utilities installations above or below ground. There seems to be a motley collection of cones, drums, barricades, and flashing signs to protect workers from moving traffic. They are universally proclaimed a great nuisance. What is not generally known is that they're a product of careful planning and are meticulously executed and regulated. Work zones are unique places of activity and are designated areas on a street or a highway where construction or maintenance is taking place. A work zone is easily recognizable by the use of traffic control devices in the color **ORANGE**.

Signs alert motorists to an approaching work zone, while going through it, and when they are leaving the zone.

Work zones usually affect two parties; workers and the motorists, although pedestrians may also come into the picture. Because of its unusual character and shifting nature the safety of all concerned must be kept in mind when constructing a **TRAFFIC CONTROL PLAN**.

TRAFFIC CONTROL PLAN:

Ideally, the best means of controlling traffic during work zone activities is closing off the road entirely and diverting traffic through an alternative route. Such a luxury is rarely at the disposal of municipalities and agencies, so work must carry on with a minimum curtailment of traffic flow.

To keep the traffic from entering the work zone, the Traffic Control Plan should:

- Get the drivers attention, in sufficient time.
- Warn the drivers of the approaching work zone.

- Slow the speed of vehicular traffic.
- Guide motorized traffic safely around the work zone.
- Return motorized traffic to normal flow after exiting the work zone.
- Minimize traffic disturbance.

It follows from this that a traffic control plan must concern itself with five main areas (AT BAT):

1. **ADVANCE WARNING AREA**— tells traffic what to expect ahead.
2. **TRANSITION AREA**—redirects or shift traffic from the normal path to a new path.
3. **BUFFER AREA**— provides an area of separation between traffic flow and the activity area and provide recovery space for errant vehicles.
4. **ACTIVITY AREA**— where work, equipment, and materials storage takes place.
5. **TERMINATION AREA**— lets traffic return to normal flow.



Traffic Control is best achieved through **TRAFFIC CONTROL DEVICES**.

TRAFFIC CONTROL DEVICES

Traffic control devices are any devices used to delineate or mark changes in traffic path and fall into seven (7) categories. For them to be effective they must be **STANDARD**. These standards follow the NYS manual for uniform traffic control devices (MUTCD). These are normally understood as:

1. **SIGNS**
 2. **TRAFFIC SIGNALS**
 3. **PAVEMENT MARKINGS**
 4. **DELINEATION DEVICES / BARRELS**
 5. **CHANNELIZATION DEVICES**
 6. **HAND SIGNALLING DEVICES**
 7. **LIGHTING DEVICES (i.e., flasher)**
- (Continued on page 3)*



2003 Issue
Volume 1, Issue 3

Inside this issue:

Hazardous Waste Management	2
EHS Intranet	3
Time To Get A Flu Shot	4
EHS Awards	5
LockOut/TagOut	6
Mercury: At Home And In The Workplace	7
Bureau EHS Personnel	7
EHS Contest	8

Editor

Charmaine A. Richardson

Contributors

Environmental Coordination Committee

Health & Safety Coordination Committee

Office of Environmental, Health & Safety Compliance

Hazardous Waste Management



On February 5, 2003, the Environmental Coordination Committee and the Agency Compliance Officer formally approved five (5) Waste Management Programs, which were developed by Framatome-ANP in conjunction with NYC DEP Environmental Health and Safety (“EH&S”) staff. The five programs cover Hazardous Waste Management, Hazardous Waste Identification, Hazardous Waste Manifests, Universal

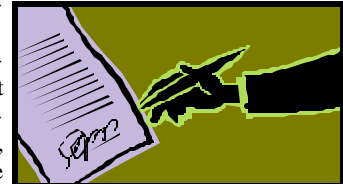
Waste Management Procedures, and Used Oil Management Procedures. The intent of these Programs is to assist NYCDEP facilities in developing consistent programs to be utilized by NYC DEP to insure compliance with all Federal and State laws, statutes, and regulations that cover all types of waste materials.

The Hazardous Waste Management Program is the most comprehensive of the five Programs. The programs define the responsibilities of the Responsible Managers and other personnel charged with hazardous waste management at NYC DEP facilities. A crucial portion of the Program covers the definitions of Hazardous Waste Generator Status. All DEP sites, which generate hazardous waste, fall into one of three categories of generator: Conditionally Exempt Small Quantity Generators (“CESQGs”), Small Quantity Generators (“SQGs”), and Large Quantity Generators (“LQGs”). This determination is based on the amount of hazardous waste that is generated at a given site during a calendar month: CESQGs generate less than or equal to 220 pounds of non-acute hazardous waste or less than 2.2 pounds of acutely hazardous waste; SQGs generate more than 220 pounds but less than 2,200 pounds of non-acute hazardous waste or less than 2.2 pounds of acutely hazardous waste; and LQGs generate greater than or equal to 2,200 pounds of non-acute hazardous waste or greater than or equal to 2.2 pounds of acutely hazardous waste. The program covers the many regulatory requirements that each category of hazardous waste generator is subject to based on its generator status. Such requirements include waste characterization, storage, shipping, inventory, accumulation periods, container management, waste minimization, preparedness, prevention and contingency procedures, and personnel training.

The Hazardous Waste Identification Program specifically covers the many regulatory requirements involved in the characterization of hazardous wastes. Definitions of solid and hazardous wastes are provided. The resulting management of wastes is dependent on characterization, since more toxic or hazardous materials require more stringent procedures. Characterization is generally accomplished through laboratory analysis or process knowledge. Waste stream management procedures are dependent on the characterization of a given waste, and the resulting waste stream management procedures, such as record keeping, training, and other

requirements, are described.

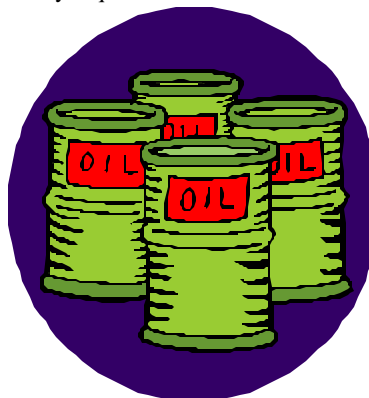
The Hazardous Waste Manifest Program describes how NYC DEP personnel will complete and maintain hazardous waste manifests in accordance with applicable State and Federal laws and regulations. As described above SQG and LQG hazardous waste generators are subject to more stringent regulatory requirements, including the use of hazardous waste manifest. The manifest document is used by the waste generator (e.g., NYC DEP) to track the waste from “cradle to grave,” which essentially means from the point of generation to the ultimate disposal of the waste by a licensed Treatment, Storage and Disposal Facility (“TSDF”). Many specific requirements must be following in the preparation of the manifest, including pre-shipment procedures, manifest distribution, training requirements, record keeping, out-of-state shipments, and exemptions.



The Hazardous Waste Manifest Program describes how NYC DEP personnel will complete and maintain hazardous waste manifests in accordance with applicable State and Federal laws and regulations

The Universal Waste Management Program covers this specific category of waste, which is governed by somewhat less stringent regulations than other hazardous wastes. Universal waste, by definition, includes batteries, various types of lamps (e.g., fluorescent, mercury vapor, and neon), pesticides, and mercury-containing thermostats. The Program describes the regulatory requirements covering the storage and management of Universal Wastes, the shipment of such wastes to Universal Waste Destination Facilities, training and record keeping requirements.

The Used Oil Management Program is similar to the Universal Waste Management Program in that it covers the management of another specific type of waste that is also subject to somewhat different regulatory requirements. Used oil includes any oil that has been refined from crude oil or any synthetic oil that has been used and, as a result of such use, has become contaminated with physical or chemical impurities. Examples include used motor oil, gear oil, cutting oil, transmission fluid, hydraulic fluid, and dielectric fluid. Identification and characterization procedures of used oil are described, and particular emphasis is placed regulatory requirements of used oil that may have been mixed with hazardous wastes. Specification determination is a crucial component of used oil management since the presence of certain heavy metals and other toxic substances, such as PCBs, will determine the disposition of the used oil. Used oil storage areas, shipment, training and record keeping are also covered by specific procedures described in this program.



NEW OEHSC Intranet Address: <http://egov.nycnet/dep/default.asp>



The Office of Environmental, Health and Safety Compliance Intranet site has moved. Please make a note of the new location.

We will be continuing the process of expanding this system out to all

DEP staff with network connections. Feedback, suggestions or comments regarding this site should be forwarded using the "Contact Us" feature on the home page.

Information Technology staff only with technical questions can contact Michael J. Egan via e-mail.

WORK ZONE SAFETY

(Continued from page 1)

All Traffic Control devices must fulfill a need, be **VISIBLE**, be **STANDARD**, give one **CLEAR** message, not mislead the public, and of course not be a hazard itself.

WORK ZONE SAFETY AWARENESS:

The same principles of Safety apply to Work Zone Safety as to any thing else.

Workers Safety

Hazards:

Being struck by intruding vehicles, normal work hazards associated with the job (i.e., equipment hazards, fall hazards, trip hazards, chemical hazards, asbestos, hot asphalt mixes, etc

Prevention:

Do not stray outside the delineated activity zone. It is not only demarcated to keep traffic out but keep you **IN**. Use proper PPE according to the assessment done in the Work Safety Plan. Take fluids and keep cool on hot days. Follow instructions and always keep a wary eye out for stray traffic hazards, even work vehicles within the activity area. Since workers are directly under the guidance of DEP their training in all aspects of Work Zone and Job Safety is a prime requirement.

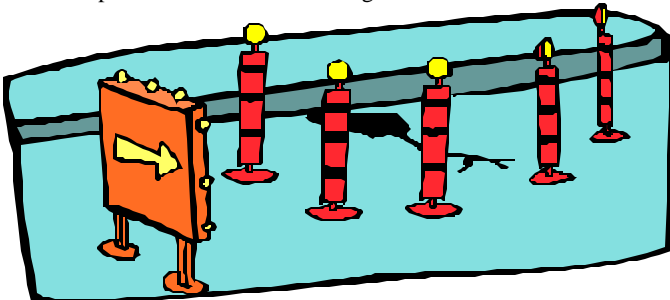
Pedestrians Safety

Hazards:

These can be basically divided into two: Hazards from traffic and Hazards from the work site.

Prevention:

Pedestrians should be provided a safe, convenient travel path, which separates them from all dangers of traffic and work site



hazards. Keep to this delineated path.

Motorist Safety

Hazards: Hitting someone or some object through excessive speed for the zone, moving vehicles intruding into work area, driver didn't see, driver didn't know what to do, driver didn't have time to react.

Prevention:

Traffic Controls devices, proper warning notices, and flaggers. A great part of the hazards inherent in such a dangerous zone are identified by appropriate and timely information.



Work Zone Safety for the driver emphasizes the **THREE R's**.

Recognition: identifying the Work Zone, watching for early warning signs, looking for lane closures ahead or merging traffic and posted speed.

Reaction: responding to the Work Zone environment, expect the unexpected, anticipate the possibility of changes in traffic patterns, be aware of the presence of heavy equipment.

Responsibility: understanding that it is your **DUTY** to drive responsibly at all times. Take extra precautions when in a Work Zone. Do not take unnecessary chances, such as speeding, tailgating and changing lanes, that will put you or others in jeopardy. Be patient, pay attention to the signs, and follow directions

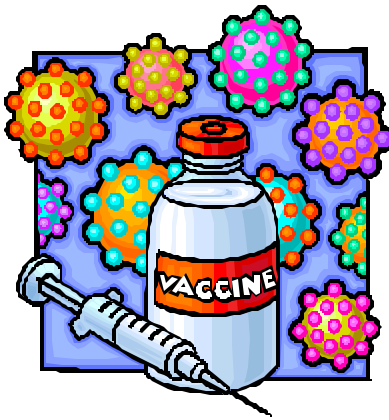
SAFETY TIPS FOR THE DRIVER:

1. Be alert when you see **ORANGE**. Orange signs, cones and barrels alert you to a work zone.
2. Driving through a Traffic Work Zone requires caution, concentration and common sense.
3. Keep an eye out for the unexpected.
4. **DRIVE THE POSTED SPEED**. This will always be decreased through the Traffic Work Zone. Speeding fines are usually **DOUBLED** inside work zones.
5. Watch out for workers.
6. Do not change lanes or pass in work zones.
7. Keep a greater distance between cars than normally.
8. Obey signs, channelization devices and pavement markings. They show direction through the Work Zone.

Time To Get A Flu Shot

Get a flu shot every year to protect yourself and your family.

- Each year, more than half a million New Yorkers get the flu, a serious and highly contagious respiratory illness with fever and cough or sore throat.
- Several thousand New Yorkers – mostly young children and the elderly – are hospitalized every year for flu and pneumonia. *And every year, more than 2,000 die.*
- If you are 65 or older, a flu shot can keep you out of the hospital and even save your life.
- Flu season runs from October through April. *The best time to get a flu shot is early in the season (October or November).* But getting a shot any time during flu season protects you.
- If you got a shot before, it won't protect you now. New flu viruses appear every year. You need *this* year's flu shot for *this* year's flu.
- Many New Yorkers qualify for free or low-cost flu shots. Visit www.nyc.gov/health/flu or call 311 for information.



Who Should Get a Flu Shot

Anyone can get the flu, so almost everyone can benefit from getting a flu shot. People at high risk should *always* get a flu shot.

High Risk (Should Get a Flu Shot Every Year)

- All people age 50 and up, especially those 65 and older.
- Residents of nursing homes and other long-term-care facilities.
- Pregnant women.
- All persons with long-term health problems, such as:
 - Diabetes.
 - Lung disease, including asthma.
 - Heart disease.
 - Kidney disease.
 - Sickle cell anemia.
 - Immune system problems (including people with HIV/AIDS, and those being treated for cancer).
- Children and teenagers (2 to 18 years old) on long-term aspirin therapy.
- All children 6 to 23 months of age. (Babies under 6 months can get the flu, but they are too young for a flu shot.)

To help protect people at high risk for the flu, the following people should also get flu shots:

- All close contacts of individuals listed above, such as household members (including children 6 months and older), and persons who provide home care.
- Health care workers and employees of nursing homes and other long-term-care facilities.

Normal Risk (May Want to Get a Flu Shot Every Year)

- Persons who provide important community services, such as police and firefighters.
- People in schools and colleges, or who live in crowded conditions.
- Anyone who wants to reduce the chance of getting the flu.

It's okay to get a flu shot if you have a minor illness, such as a cold or diarrhea.

Who Should NOT Get a Flu Shot

- People who have had a serious reaction to a previous flu shot.
- Anyone with a severe allergy to eggs.

Flu Shots DO NOT Cause the Flu

- The flu shot uses inactivated ("killed") vaccine that *can't* give a person the flu. Flu vaccine, like other vaccines, may occasionally cause a mild reaction, such as soreness at the site of injection, but serious problems from flu shots are very rare.
- Flu shots give very good protection against the flu, but they don't keep people from getting colds and other illnesses.

Where to Get a Flu Shot

- You can get a flu shot from your family doctor or primary-care provider.
- Many employers, community centers, and senior centers offer free or low-cost flu shots.
- To find out where to get a flu shot, visit www.nyc.gov/health/flu or call 311.

Pneumococcal Vaccine

- Pneumococcal disease is caused by bacteria, and is the most serious complication of the flu.
- Everyone 65 and older should get this vaccine once for life-long protection. A pneumococcal vaccine should also be given to anyone with a chronic illness or a compromised immune system.
- A single re-vaccination is recommended after 5 years for those with a compromised immune system or people vaccinated *before* age 65 who are currently over 65.

You can get a flu shot and other vaccinations, such as the pneumococcal vaccine or routine childhood immunizations, at the same time.

More Information

- Visit www.nyc.gov/health/flu or call 311.
- Centers for Disease Control and Prevention: www.cdc.gov/nip/flu or call 800-232-2522.





ENVIRONMENTAL & HEALTH AND SAFETY AWARDS

**MANAGERS AND SUPERVISORS,
HAS SOMEONE ON YOUR STAFF DEMONSTRATE
EXTRAORDINARY AWARENESS
OF HEALTH AND SAFETY ON A JOB?**

**Since everyone benefits, why not nominate
that person for an
Environmental or Health and Safety
Award!**

**TO BE CONSIDERED FOR AN AWARD, THE NOMINEE MUST HAVE
PERFORMED A TASK THAT EXCEEDED EXPECTATIONS AND STANDARDS OR DEMONSTRATED A SPECIAL INITIATIVE ABOVE AND BEYOND WHAT IS EXPECTED ON A PARTICULAR WORK ASSIGNMENT.**

**To nominate a candidate, ask your Bureau
Administrator for an EHS Award Nomination Form.**

Fill it out, sign it, and submit it to:

Herb Roth

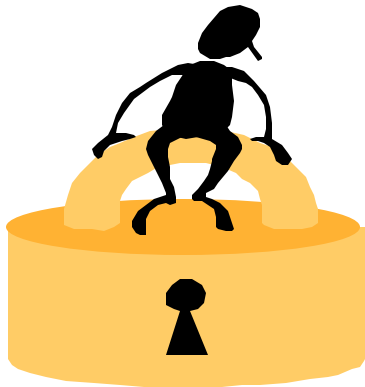
Human Resources Management

(18th floor - Lefrak)

It's that easy!

Lock-Out/Tag-Out: Control of Hazardous Energy

Many serious injuries have occurred in general industry and construction when someone thought a machine or process was turned off, only to discover at the worst possible time that this was not the case. DEP facilities and projects utilize a seemingly endless variety of equipment, including sluice gates, centrifuges, conveyor belts, sludge digesters and even tunnel boring machines. DEP's Lock-Out / Tag-Out (LOTO) policies



and procedures manual provides a way to protect yourself and others by ensuring that equipment and systems are securely shut off and any stored energy is relieved or controlled. Without a LOTO system, equipment could unexpectedly start up, either because of stored energy, or because someone else thought it was OK to turn it on. *Even if you don't maintain equipment yourself, you need to have an awareness of LOTO to be able to recognize locked out equipment and systems in your work area.*

There are three basic elements in a Lock-Out / Tag-Out program. These are **training, procedures, and inspections**.

Training

LOTO recognizes two types of employees: a) affected employees and b) authorized employees. **Affected employees** are affected by or work near equipment that are locked out or tagged out and require awareness training regarding the LOTO program. They are not permitted to perform

maintenance or service work that requires Lock-out / Tag-out. **Authorized employees** implement the LOTO procedures and perform the actual maintenance or servicing work. Your supervisor will determine whether you fall under either of these classifications and will see that you are provided the necessary training.

Procedures

DEP's LOTO policy requires that hazardous energy sources be **isolated and rendered inoperative** before maintenance or servicing work can begin. These energy sources include electrical (either active current or stored), pneumatic, thermal, hydraulic, mechanical, rotational and radiation. Isolation can be achieved by opening an electrical switch, removing a circuit breaker or closing a valve. Following isolation, locks and tags are applied to prevent unauthorized use and to clearly display information about the

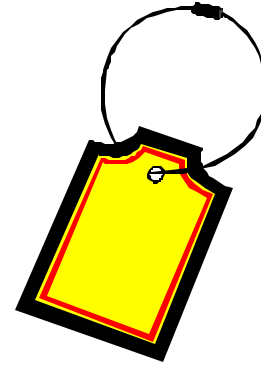
A sound knowledge of all aspects of the equipment or system is important in implementing the LOTO procedure.

lockout. Never remove or bypass a lock or tag that was not applied by you. Only the person who placed a particular lock or tag is authorized to remove it.

There are three types of LOTO procedures used at DEP:

- *General LOTO Procedures* for equipment that can be isolated at a single point.
- *Written Equipment-Specific LOTO Procedures* for equipment requiring more than one energy source.
- *Group LOTO Procedures* for cases where maintenance personnel will "share" a single LOTO lock.

Details of each procedure are spelled out in the DEP EHS Lock-out / Tag-



out policy and procedures manual.

Regardless of which procedure is used, a sound knowledge of all aspects of the equipment or system is important in implementing the LOTO procedure.

Written documentation of the LOTO procedure for a specific piece of equipment is required if the equipment has two or more energy sources. These procedures communicate important information to persons performing Lock-out / Tag-out. They identify energy sources, provide step-by-step instruction for locking and tagging out energy sources, releasing stored energy, and verifying that the equipment cannot be re-started after lockout is applied. Procedures must be updated and any changes must be known by everyone who may be affected by them. The highest ranking manager or supervisor at each DEP facility (the "Responsible Manager") will designate qualified persons to write specific LOTO procedures.

Inspections

Annual LOTO inspections will be performed at each facility by an authorized Bureau EHS employee. The purpose of the inspection will be to identify and correct any deviations from or deficiencies in the LOTO procedures.

In short, LOTO is your best bet for avoiding unpleasant surprises when servicing equipment and systems.



Mercury: At Home and in the Workplace

Mercury occurs naturally in the environment and exists in several forms. Elemental mercury is a shiny, silver-white metal that is a liquid at room temperature. It is used in a variety of household and industrial products, including thermometers, barometers, thermostats, fluorescent light bulbs, and some switches. Mercury in these devices is contained in glass or metal, and generally does not pose a risk unless the item is damaged or broken, and mercury is released.

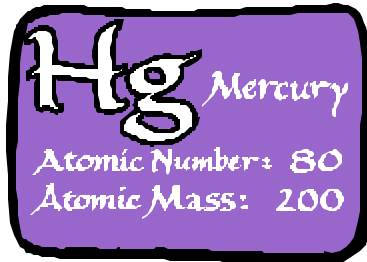
If a mercury containing item is damaged or broken and mercury is released, a person can be exposed by breathing in contaminated air (mercury vapors), from swallowing or eating contaminated water or food, or from having skin contact with mercury. In the case of metallic mercury, breathing in mercury vapors presents the greatest risk because mercury can easily enter the bloodstream from the lungs and rapidly go to other parts of the body.

Metallic mercury vapors may affect many different areas of the brain resulting in a variety of symptoms including personality changes, tremors, changes in vision, deafness, muscle in-coordination, loss of sensation, and difficulties with memory.

The Agency for Toxic Substances and Disease Registry suggests the following steps if you break a mercury containing device at home;

- Remove children from the area;
- Do not try to wipe or blot mercury up, it is not absorbent, to do so will only spread the mercury and break it up into smaller beads, making it more difficult to find and remove;
- Do not attempt to vacuum-up mercury, to do so will disperse vapors and contaminate the vacuum;

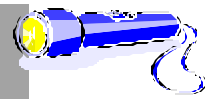
- Do clean-up the beads of metallic mercury by using one sheet of paper to carefully roll them onto a second sheet of paper, or by sucking up very small beads of mercury with an eye-dropper;
- Place collected mercury into a plastic bag or airtight container along with the paper and/or eyedropper;
- All material used in the clean-up should be removed from the house and disposed of properly, according to instructions provided by your local health department;
- Try to ventilate the room with outside air, and close off the room from the rest of the house;



The Department of Environmental Protection (DEP) has used many mercury containing items to help in its mission to deliver water to New York City. The age of the City's water supply system meant that the many flow control devices in use were the modern materials of their day. Mercury monometers and sluice gate operators used elemental mercury as integral parts of their design. Both the Bureaus of Water Supply and Water and Sewer Operations utilized these mercury containing devices to measure and regulate water flow through aqueducts and shafts. These devices, though state of the art in their time, were found to have certain disadvantages when compared to the newer technologies of today. Realizing this, the DEP has started the proactive task of replacing these older devices with newer, efficient and safer equipment that will continue to serve the City's needs and yet provide employees with the safer work environment they deserve. Although most of the mercury has been contained, removed or inventoried, there may still be some places that employees may find free mercury. If you discover a broken or damaged mercury containing device in the workplace, contact your supervisor and/or your Health and Safety representative for assistance.



Bureau EHS Personnel



<u>Name</u>	<u>Bureau</u>	<u>Contact #</u>	<u>Name</u>	<u>Bureau</u>	<u>Contact #</u>
William Yulinsky	BWSO	(718) 595-5272	Lynn Sadosky	BWS	(914) 773-4418
Leslie Laylock	BEA	(718) 595-3315	William Haberland	BWT	(718) 595-5052
Julia Bourdier	Legal Affairs	(718) 595-6554	Stella Kyriakides	BEE	(718) 595-6004
Larry Walker	BCS	(718) 595-6666	Michael Mannino	ACCO	(718) 595-3224
Rosemary Fodera	ECB	(212) 361-1522	Virginia Smyth	BEC	(718) 595-4404
Mary Grannum	BEPA	(718) 595-4411	Grace White	Public Affairs	(718) 595-6603
John Lento	BMB	(718) 595-3424			

Office of Environmental,
Health and Safety
Compliance
59-17 Junction Blvd.
10th Floor
Flushing, NY 11373
(718) 595-4782
Fax: (718) 595-5546

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 to 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 Slogan Contest

OEHSC is looking for suggestions for a great **DEP Environmental, Health and Safety slogan**.

Send your suggestions along with your name, Bureau and worksite location by **January 9, 2004** to the:



Attn: OEHSC Slogan Contest
Office of Environmental, Health and Safety Compliance
59-17 Junction Blvd., 10th floor, Flushing, NY 11373

Or Fax

Attn: OEHSC Slogan Contest
(718) 595-5546

Or E-mail

Attn: OEHSC Slogan Contest
kmoore@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 and the winner will be published in the next issue.