The Column 2 Issue 3 June 2008 The Column 2 Issue 3 June 2008

NYC Department of Environmental Protection Bureau of Water & Sewer Operations, Environmental Health & Safety 59-17 Junction Boulevard, 3rd Floor Flushing, New York 11373-5108



"The key to controlling heat stress at any stage of acclimatization is drinking enough water to replenish the fluid the body loses as sweat in cooling itself." -BWSO EH&S Staff



BUREAU OF WATER & SEWER OPERATIONS ENVIRONMENTAL HEALTH & SAFETY DIVISION

Serious About Heat Stress by BWSO Environmental Health & Safety Staff

Oven-like temperatures across the city may bring sun-lovers out this summer, but for outdoor workers the combination of heat and humidity can be debilitating – or even deadly.

Individuals who spend some part of their working day in a hot environment are more susceptible to heat stress (or heat stroke), a serious heat-related illness that occurs when the body becomes unable to control its temperature.

According to the Centers for Disease Control, body temperatures can rise to a deadly 106 degrees Fahrenheit or higher within 10 to 15 minutes, leading to heat stress.

The body has natural mechanisms to release excess heat –such as increasing blood flow to outer layers of skin and perspiring. However, sweating is effective only if the humidity level is low enough to permit evaporation, and the fluids and salts lost are adequately replaced. Moreover, the sweating process does not reach full efficiency until the body gets "acclimatized" to working in hot weather, which takes a week or two.

Continued on Page 3

A Few Words About the BWSO Employee Suggestion Program...

Dear BWSO Employees:

In our travels throughout the Bureau, we hear comments about the BWSO Employee Suggestion program. Some of them are positive and some, not so positive. I would like to take a few minutes to address some of the more common questions or concerns about the program.

Comment: "I have not seen a response to my suggestion."

All suggestions are reviewed by a committee of EHS staff. Each suggestion is then logged in and forwarded to the group or person within BWSO who the committee believes is the best party to respond to, consider or resolve the suggestion. The entire process for each suggestion takes about two months, so you may not see a response for at least that length of time.

Comment: "Nothing is really being done to address our suggestions."

It is important to realize that some suggestions are not feasible or appropriate. This determination is made by BWSO Management. In most of these cases, justification of the decision will be provided and communicated back to the facility in the bi-monthly suggestion update.

Suggestions with merit take time to address and plans for them will be noted in the bi-monthly updates. For example, 2 suggestions to improve the apprentice laborer training program have been taken up and planning work is under way by Field Operations and EHS.

Some suggestions fit in with the longer term goals, values, and mission of the Bureau and may be considered as that work proceeds. For example, we have had 2 or 3 suggestions which will be considered and incorporated into

the new Hansen Information Management System (Version 8), as well as one or two suggestions on hiring and training qualifications, which have been forwarded to Bureau Administration and EHS for evaluation. Some entries are in the form of questions, to which answers are provided in the bimonthly update.

One of the benefits to having all employee suggestions in a database is that we can monitor progress, identify trends, and provide a forum where ideas and concerns are much less likely to be overlooked. With your help, we will continue to identify ways to improve the program. For example, going forward, we are adding a quality assurance step to ensure that the offered solution actually addresses the suggestion.

Continued on Page 2

In this issue:

Serious About Heat Stress

A Few Words About the BWSO Employee Suggestion Program...1

So You Think You Can Drive? 2

Environmental

Enforcement Highlights! 2

Strange but True 2

Upcoming Training Classes 2

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

Preventing Hearing Loss

Employee Profile: Timothy McKenna, Groundwater Operations

·

BWSO EH&S Quiz

Are you prone to car accidents?

3

4

See article on page 2



"It is important that every BWSO driver is aware of the vehicle accident protocol outlined in our DEP Vehicle Operators Manual." – BWSO EH&S Staff



WIN A FREE STARBUCKS
GIFT CARD!

TAKE QUIZ ON PAGE 4

So You Think You Can Drive?

By BWSO Environmental Health and Safety Staff

Environmental Enforcement Highlights!

BWSO Environmental Health and Safety Staff

Your heart is beating hard, you're breathing fast, and you can't believe you just got into an accident. Look around. You're alive? Good. Everyone else? Even better. Now here's what you need to think about and do once the dust settles...

Because of the unpredictable nature of driving on our city streets, it is important that every BWSO driver is aware of the vehicle accident protocol outlined in our DEP Vehicle Operators Manual (VOM).

The VOM defines an accident as an incident involving "a City-owned vehicle, a vehicle provided by DEP, or a personally owned vehicle used in the conduct of City business, including:

1) Multi-Car Collisions; 2) Structural Collisions; 3) Damage Incidents; and 4) Accidents causing injury to DEP employees, and/or to others."

If you find yourself in an accident while on the job, you should take the following steps:

Step 1: SAFETY FIRST

Pull off to the side of the road, if possible, turn off the engine and turn on your hazards.

If anyone is injured, attempt to ensure that he or she is properly treated and call an ambulance if necessary.

Step 2: NOTIFY NOTIFY!

At the scene, notify the police and your supervisor.

If there is damage to the vehicle, notify DEP Fleet Services at (718) 610-0712 (from 6:30 AM to 5:00 PM) or at (718) DEP-24HR (337-2447) after regular business hours.

If the accident was a **structural collision** (the vehicle hits a building, or object, or is hit by an object other than a vehicle), State Law requires the driver to report the accident as soon as possible to the nearest police station or judicial officer.

Step 3: INFORMATION IS KEY

Exchange information found on the **driver's license**, **vehicle registration**, and **insurance card**; refer to the VOM for a detailed list of the required information.

New York City is self-insured and claims against the city must be filed with the Office of the Comptroller. Therefore, if other driver(s) request City insurance information, you should provide the driver(s) with the Comptroller's address which can found in the VOM.

All of the information obtained must be recorded on the MV-104 (NYS Department of Motor Vehicles Report of Motor Vehicle Accident) and on the MV-104 Supplemental Report.

The forms must then be forwarded within 48 hours of the accident to the Vehicle Safety Coordinator at the Division of Fleet Services.

For more information on DEP's vehicle accident procedures, including supervisor's responsibilities and accidents involving injuries, refer to the DEP Vehicle Operators Manual at http://pipeline/subsections/fleet/pdf/vehicle_op_manual.pdf.

Strange but True!

The Case of the Chilli Dog

One display at a 7-Eleven prompted an outraged woman to take action! Cindy Gravelle spotted a miserable looking pooch in the walkin cooler, pressing its face up against the glass door. The next day, Gravelle found that the dog, an American Eskimo, was kept in the cooler for safekeeping while its owner worked a shift at the store. The horrified Gravelle said "What is wrong with these people?" In the pursuit to rectify the situation, Calgary Humane Society officials contacted the store about the strange pet-keeping practice. In defense, Alyn Edwards, 7-Eleven spokesman said it was "a discretionary decision" based on "unique circumstances" which will not happen again. The dog's owner thought that since the dog was indeed an Eskimo dog, it needed to be kept in very cold surroundings.

http://veryweirdnews.com/2008/02/



Congratulations to:

STATEN ISLAND SEWER MAINTENANCE

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

OUTSTANDING PERFORMANCE*

at their

June 10, 2008 OEHSC EHS AUDIT

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

Upcoming Training Classes: <u>June & July 2008</u>

- 1. Water Plant Operator Training- Advanced Operations & Supervisor Course
- 2. New Employee Orientation
- 3. Hot Work
- 4. Scaffolding
- 5. Lock Out Tag Out
- 6. Excavation
- 7. National Incident Management System

Questions? Contact Nelson Leon x5544

Get your 411 on the latest Environmental Crimes
Here are four offenders that made the list:

- 1. Proving that past mistakes can return to haunt you, Century Oil Acquisition Corp. will spend \$193,538 to resolve federal and state compliance violations of underground storage tank (UST) regulations at two Texaco gas stations that have not been in service since the 1990s. The penalty issued by the U.S. Environmental Protection Agency (EPA) involves the company's abandonment of the two facilities in addition to its neglect to maintain six underground storage tanks with corrosion prevention, and fuel leak prevention and detection provisions.
- 2. Despite their recent fine for similar violations from The Washington Department of Ecology, JPS Holdings of Normandy Park ignored an order to apply for a construction storm water permit, and continued to discharge storm water without a permit. Now, the company faces an \$85,318 penalty.
- **3.** Spectro Alloys Corp. has agreed to pay the Department of Environmental Protection in Minnesota more than \$70,000 to address violations of the federal Clean Air Act at its aluminum recovery plant. The company was charged with releasing excess levels of furans and dioxins, and failing to maintain 3 years worth of afterburner inspection records for two of its furnaces.
- **4.** The Ohio Environmental Protection Agency reached a settlement which has subjected the Samuel Adams Brewery Company to pay an \$18,360 penalty and correct deficiencies in its chemical risk management plan (RMP) in regards to the amount of anhydrous ammonia at one of its facilities.

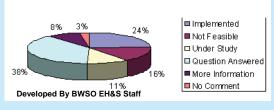
For more information:

www.ecy.wa.gov/news/20007news and the EPA web site for references

The BWSO Employee Suggestion Program... Continued from Page 1

Here is a breakdown of the current state of suggestions (as of June 11, 2008):

Employee Suggestion Program Statistics



We ask for your patience, ongoing participation and constructive comments on how we can make the program work.

Finally, please keep the suggestions in a positive and constructive framework. The long term goal of the suggestion program is to improve the quality and safety of our work lives.

If you feel that a suggestion is not being addressed or you have any questions about how suggestions are reviewed, please contact me (X5266) or Karen De Vito (X5343).

Sincerely,
Persis Luke
Director, Environmental Health and Safety

What's So Important About Occupational Injury and Illness Recordkeeping? Part 1 in a 3 part series on Injury Recordkeeping and Investigation By BWSO EH&S

A colleague stumbles up to you clutching his back and yells..."My back has been hurting ever since I unloaded that equipment from the truck yesterday! I think I need to go to the doctor!" Does this sound familiar to you?

I'm sure many of you have had to deal with an employee injury/illness at your facility. Questions will inevitably arise in each case of work-related injury or illness, and many of you expect to receive the correct answers. In the next 3 issues of the Conduit, we will give you information to help you further understand and manage the complexities surrounding injury reporting and management. But first, let's clarify some general questions about the importance of recordkeeping.

Recordkeeping is a critical part of BWSO's health and safety efforts for several reasons:

- Keeping track of and monitoring work-related injuries and illnesses can help us prevent them in the future.
- Using injury and illness data helps identify problem areas or trends. The more we know the better! We can identify and correct hazardous workplace conditions and update equipment or engineer the hazard risk out of the task.
- We can better target and administer company health and safety programs with accurate records.
- As employees become aware of injuries, illnesses, and hazards in the workplace, workers are more likely to follow safe work practices and report workplace hazards.

Recording or reporting a work-related injury,



"Keeping track of and monitoring work-related injuries and illnesses can help us prevent them in the future."

–BWSO EH&S Staff

Serious About Heat Stress Continued from Page 1

The key to controlling heat stress at any stage of acclimatization is drinking enough water to replenish the fluid lost as sweat when the body is cooling itself.

So, how does heat stress occur?

The body reacts to a high external temperature by circulating blood to the skin, which increases skin temperature, and allows the body to give off its excess heat through the skin. However, if the muscles are being used for physical labor, less blood is available to flow to the skin and release the heat.

Bad news...In certain cases an individual experiencing heat stress may not be able to release excess heat; instead, the body stores it. When this happens, the body's core temperature rises, and heart rate increases. As the body continues to store heat, the individual will begin to lose concentration, have difficulty focusing on a task, may become irritable or sick, and will often lose the desire to drink. The next stage may involve fainting or death if the

illness, or fatality does not imply that the employer or employee was at fault, that a PESH/OSHA rule has been violated, or that the employee is eligible for workers' compensation or other benefits. Recording an injury or illness on the PESH/OSHA recordkeeping forms only confirms three things:

- (1) That an injury or illness has occurred;
- (2) That the employer has determined that the case is work-related (using PESH/OSHA's definition of that term); and
- (3) That the case is non-minor (i.e. recordable).

There are two separate recordkeeping systems: State Workers' Compensation and PESH/OSHA. All work-related injury and illness cases are reviewed by State Workers' Compensation system. Many cases that are recorded in the PESH/OSHA system are compensable under the State Workers' Compensation system, but many others are not. The two systems have different purposes and scopes. The PESH/OSHA recordkeeping system is intended to collect, compile and analyze uniform and consistent nationwide data on occupational and illnesses. The Workers' iniuries Compensation system, in contrast, is not designed primarily to generate and collect data, but is intended to provide medical

coverage and compensation for workers who are killed, injured or made ill at work. The coverage varies from state to state.

Because of the differences between the two systems, recording a case does not mean that the case is compensable, or vice versa. When an injury or illness occurs to an employee, in order to determine whether the case is recordable or compensable, or both, the employer must independently analyze and manage the case from the perspective of both the PESH/OSHA recording criteria and the requirements of the State Workers' Compensation.

EH&S has developed a comprehensive database, which can analyze injuries by type, contributing factors, and location. We will look at some of these trends and discuss what makes an injury recordable in the next issue of The Conduit!

person is not removed from the heat stress.

Who is more likely to suffer from heat stress?

It is difficult to predict just who will be affected and when, because individual susceptibility varies. Age, weight, degree of physical fitness, degree of acclimatization, metabolism, use of alcohol or drugs, and a variety of medical conditions such as hypertension all affect a person's sensitivity to heat. Even the type of clothing worn must be considered.

If a worker shows signs of possible heat stress, call 911 immediately. While waiting for an ambulance, place the worker in a shady area and remove their outer clothing. The worker's skin should be wetted-down and air movement around the worker should be increased to improve evaporative cooling until professional methods of cooling are initiated and the seriousness of the condition can be assessed.

For more Information:

http://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_4.html

Preventing Hearing Loss

By BWSOEH&S Staff

"Huh, What Did You Say?"

This phrase is being used more often by Americans, particularly children. More than 30 million Americans, or 1 in 9 individuals, have significant hearing loss. Thirteen (13) out of every hundred (100) school age children have some form of hearing loss.

What Causes Hearing Loss?

The largest contributing factor to hearing loss is exposure to loud sounds for long periods of time. Common sources of these harmful sounds are jet engines, certain machinery, surround sound and high volume headsets. Every time you turn up the volume on your music or a movie in order to feel the sound effects, you may be risking your hearing and subjecting yourself to irreversible hearing loss. Every time you do not wear hearing protection on the job, when it is appropriate and necessary, you are risking hearing loss.

Over time, the continual exposure to excessive sound for prolonged periods will damage your hearing enough to interfere with your ability to communicate with your loved ones, and can potentially isolate you from friends and family. Hearing loss may also affect your performance in school or on the job.

Once thought to be a problem of the elderly, significant hearing loss affects 1 in 6 Baby Boomers. The problem is not one of age but the degree of noise and exposure to excessive noise that is so prevalent in today's society.





Picture from www.ncbegin.o

The "Amazing" Hair Cell

Located within the inner ear in the fluid-filled snail-shaped cochlea, hair cells are small sensory cells in the inner ear. These sensitive structures give us the ability to hear very soft sounds as well as the loudest sounds. They derive their name from the tufts of stereocilia that protrude from the apical surface of the cell. These stereocilia bend in response to sound waves, and in turn sends signals to the brain. When you are exposed to harmful noise, it is your hair cells which are damaged. Hearing loss occurs because loud sounds are really just large pressure waves. These large pressure waves bend the stereocilia too far, sometimes to the point where they are damaged. This kills the hair cell. Once damaged, our hair cells cannot grow back causing noise-induced hearing loss





Normal Hair Cell Damaged Hair Cell

For more Information: http://www.bcm.edu/oto/research/cochlea/Hearing/

NYC Department of Environmental Protection

Environmental Health & Safety Division Bureau of Water & Sewer Operations 59-17 Junction Boulevard, 3rd Floor Flushing, NY 11373-5108 Phone: (718) 595-5343 Fax: (718) 595-5541

E-mail:

BWSOEHS suggestions@dep.nyc.gov

James J. Roberts, P.E. BWSO, Deputy Commissioner

Persis D. Luke

Director, Environmental Health & Safety

Occupational Health & Safety:

Fred Chyke-Okpuzor, Manager Marc Blaise Alexander Grabarnik Jacqueline Hincapie Fernando Park Vyacheslav Repik Lal Sarju John Townsend

Environmental Compliance:

Shay McAtamney, Manager Matthew Dominick Nicholas Minunni Harry Singh Jane Weber Melissa Whitley

Program Development -- Education, Training, Audits and Administration:

Karen De Vito, Manager Julie Bae Sheldon Hudson Jennifer Jones Jenny Lai Nelson Leon Michele Moorgen Esther Rodriguez Andrea Shivcharran Allan Straker

Editors

Julie Bae & Andrea Shivcharran

E-mail us at:

BWSOEHS_suggestions@dep.nyc.gov

Have an EH&S question?

Please write to us!

We'd love to hear from you!

Timothy McKenna — Supervisor (Watershed Maintenance) Groundwater Operations



Supervisor (Watershed Maintenance), Timothy McKenna enjoys everyday of his ever-changing responsibilities at Groundwater Operations Headquarters located in Jamaica, Queens. Timothy joined the Bureau of Water and Sewer Operations in 1996 and has been working in the water industry for over 25 years. Optimistic and cheerful, he is well-regarded by his peers for his flexibility and thoroughness in taking on spontaneous assignments. Timothy also plays a pivotal role in assisting with EHS tasks such as asbestos manage-in-place inspections, facility regulatory audit walk-throughs, and Compliance Tracking System (CTS) administration for Groundwater Operations...just to name a few. EH&S specialists describe him as "the perfect nominee for Environmental Health and Safety recognition."

Can you tell us a bit about your career at the DEP?

Q: Where are you from?

A: I was born in West Islip, NY, and grew up in Bayshore, NY. I currently live in Patchogue, NY.

Q: Wow, you are a true New Yorker! What would you say is the greatest thing about living in New York?

A: I would have to say the access to museums and theatres, and the sports of course!

Q: Where did you attend school?
A: I am a graduate of Brentwood
High School.

Q: Do you have any hobbies or interests? What do you like to do in your spare time?

A: I like to read history. I also like to play tennis, baseball and bowling... on the Wii! (Laughs!) Oh yeah, and I am a Yankee fan!

Q: What's the last book you've read?

A: The last book I read was 1776 by David McCullough.

Q: So, tell us, what made you choose a career at the DEP?
A: What can I say ...I was in the right place at the right time!

Q: Talk about coincidences... What is your role at the DEP?

A: I'm a supervisor at Groundwater Operations Headquarters. Generally, I manage the inventory and waste streams we generate, and assist in the operations for granular activated carbon vessels at various well stations. [Granular activated carbon is a highly adsorbent material important to water treatment.] I also provide assistance in many other areas, for instance, I create monthly reports, conduct training (ex. Site-Specific Right-to-Know), inventory equipment, and manage daily work flow.

Q: What types of EH&S duties have you participated in?

A: I schedule work through HANSEN, and update audit findings in the Compliance Tracking System. I also assist in conducting manage-in-place inspections, sampling activities for ATF(Asbestos Task Force), and Environmental Health and Safety audits with the EH&S staff.

Q: What are your qualifications?

A: I am a certified Grade 2A and Grade D Water Plant Operator. I

am HAZWOPER trained. I am also a certified Asbestos Inspector by the New York State Department of Labor.

Q: What do you enjoy about your current job?

A: I enjoy all parts of it because each day I'm doing something different. For instance, one day I will work on various assessments from UST (Underground Storage Tank) inspections to emergency lighting and waste inspections. Then the next day, I would work with an individual such as our facility Health and Safety Liaison, Marc Blaise. The various jobs make my days fly by.

Q: What do you consider your greatest achievements at the NYC DEP and in life?

A: Being asked to do this interview! (Laughs) In life, my greatest achievements would be the close relationships I share with my wife and daughter.

Q: Any final words of wisdom, advice or motto to share?

A: My final "word" of wisdom is

A: My final "word" of wisdom is "Listen!..."

"The perfect nominee for Environmental Health and Safety recognition."—BWSO EH&S Staff

TAKE THIS QUIZ: THE FIRST THREE PEOPLE TO SUBMIT CORRECT ANSWERS WILL WIN FREE STARBUCKS GIFT CARDS!

BE SURE TO INCLUDE YOUR FULL NAME AND WORK ADDRESS. FAX: (718) 595-5541 OR EMAIL:BWSOEHS_suggestions@dep.nyc.gov

1) A common heat stress symptom is:

a) Body temperature of 100° F

b) Hypothermia

c) Vomiting

- d) Frostbite
- 2) Which of the following is an appropriate hearing protective device?
 - a) Cotton balls
 - b) Your index fingers
 - c) Earmuffs with a cushion to head seal
- d) A device that reduces the noise at the eardrum to 90 dBA
- 3) According to OSHA standards, a noise level of ___ or higher exceeds the permissible time-weighted average (TWA) sound level.
 - a) 75 dBA b) 85 dBA c) 90 dBA d) 95 dBA
- In cases of _____, a supervisor must fill out an Incident Investigation report (IIR).
- a) Medical treatment
- b) First aid
- c) Absence d) H
 - d) Hospitalization of 2+ employees

Answers for April 2008 Newsletter Quiz: 1) B 2) B 3) D 4) A