

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

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 Flushing, New York 11373-5108

## Environmental Health & Safety News for BWSO



Picture: Bureau of Water & Sewer Operations Staff

***"Many field situations are active and complex. This is especially true for BWSO crews that work in public or crowded areas. Pedestrians and heavy street activity can create special concerns".***  
 —BWSO EHS Staff



BUREAU OF WATER & SEWER OPERATIONS  
 ENVIRONMENTAL HEALTH & SAFETY DIVISION

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### An Open and Shut Case?

#### How to Properly Protect Manholes and Ground Openings on the Street and at BWSO

The protection of manholes across New York City (NYC) has received much public press and a good deal of DEP's attention lately, but we still need to keep in mind that manholes are not the only ground openings of concern. All ground or floor openings need to be addressed to protect employees and the public from falls and injuries. Openings include not only manholes, but sub-grade chambers, hatchways, vaults, in-ground access points, stair/ladder openings, and all types of constructed pits.

The scope of the Occupational Safety and Health Administration (OSHA) regulation is designed to protect employees rather than the public. But, we need to think about the best way to protect EVERYONE.

The first question that must be answered is—***"What IS a ground or floor opening?"***  
 The definition of "opening" from OSHA 1910.21(a)(2) is "[a]n opening measuring 12 inches or more in its least (horizontal) dimension, in any floor, platform, pavement, or yard through which persons may fall; such as a hatchway, stair or ladder opening, pit or large manhole."

**Continued on Page 2**

### The Throgs Neck Bridge Crane Accident Reinforces the Importance of Crane and Hoist Safety at BWSO

***"Ensuring that our cranes are in good working order and inspecting them for deficiencies are two critical components of a sound Crane and Hoist Safety Program."***

—Karen Marino, Manager of Program Development, Environmental Health and Safety



Truck mounted cranes are not uncommon at BWSO operations and are often utilized by BWSO laborers while in the field when they are faced with lifting heavy objects. Ensuring that our cranes are in good working order and inspecting them for deficiencies are two critical components of a sound Crane and Hoist Safety Program. Although proper crane maintenance can be time consuming, a recent fatal accident involving a truck mounted crane on the Throgs Neck Bridge in New York City once again demonstrated the true importance of crane and hoist safety.

**Continued on Page 2**

### Do You Ever Cut Back on Your Sleep?

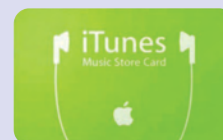
See article on Page 3.



[www.nyc.gov/health](http://www.nyc.gov/health)

***"It is important to note that the body tends to act in a cyclical manner, so consistently going to bed and waking up at a similar hour each day is critical."***

—Fernando Park, Health and Safety Specialist



**WIN AN iTunes  
 GIFT CARD!  
 TAKE QUIZ ON PAGE 3**



On September 23, 2009, EHS and friends got together to celebrate the retirement of John Townsend, former Health and Safety Specialist at the Environmental Health and Safety Division at BWSO.



# An Open and Shut Case?

Continued from Page 1

How to Properly Protect Manholes and Ground Openings on the Street and at BWSO

**Street depressions, potholes, shallow pits or gaps around street equipment would not qualify as ground openings that need to be protected by guardrails. They should however, be appropriately marked with hazard warnings like barricades, tape and cones or covered temporarily with plates or boards.**

The second question that needs to be answered is—  
**“How do you protect a ground or floor opening?”**

According to OSHA 1910.23(a)(5) “[e]very pit and trapdoor floor opening, [that is] infrequently used, shall be guarded by a floor opening cover of standard strength and construction. While the cover is not in place (for purposes of work), the pit or trap opening shall be constantly attended by someone or shall be protected on all exposed sides by removable standard railings.” The same requirements apply to manholes (1910.23(a)(6)).

The primary purpose of guarding an opening is to prevent someone from falling into it. The only appropriate way to guard an opening is to ensure that one of the following actions is taken:

- The opening is visually guarded or attended at all times; OR
- The existing cover is put back into place; OR
- A portable standard guardrail is used (see Picture No. 1 below).

**Temporary covers may be used as long as they meet strength requirements and do not project greater than one (1) inch above the floor or ground level. Covers that do have a profile greater than one (1) inch may be used as long as they are chamfered to the ground level.**



Newer installations might be equipped with “pop up” railings as seen in Photo No. 2. It is important to note that all four sides need to be guarded if the opening cannot be constantly guarded by an employee.

Many field situations are active and complex. This is especially true for BWSO crews that work in public or crowded areas. Pedestrians and heavy street activity can create special concerns. Even when a ground opening is being attended by personnel or guarded by a portable railing, it is possible for a pedestrian or a cyclist to enter a work zone. In these situations, an additional level of protection is warranted. This would include using enhanced work area delineation materials such as cones with grabber bars or barricades. This is not required by the regulations, but will add a secondary layer of protection to your work area. If you know you are going to be working in a busy area where vigilance will be challenging, you should consider using this first line of defense. Use of cones with grabber bars or wood barricades around a work area does not take the place of proper attendance to or guarding of openings. As always, you should contact EHS if you have a specific work situation or configuration at your facility on which you would like additional guidance.

For additional information, please refer to:

1. OEHS’s Guidance document “Guarding In-Ground/In-Floor Openings” - 2/1/07
2. Ed Coleman/Persis Luke Directive “Protection around Manholes - 7/30/09
3. Bureau EHS General Correspondence “Use of Cone Grabber Bars and Fall Protection” - 9/2/09

# The Throgs Neck Bridge Crane Accident Reinforces the Importance of Crane and Hoist Safety at BWSO

Continued from Page 1

On Tuesday, August 25, 2009, an electrician was operating a 25 foot truck-mounted crane with an articulated arm by remote control in the middle of the northbound lane of the Throgs Neck Bridge, when a supporting crane cable snapped and caused the boom to collapse and pin the operator to the truck. The operator was pronounced dead at the scene. The accident is currently under investigation by the Occupational Safety and Health Administration (OSHA), and the cause has not yet been determined. As OSHA performs its full investigation, it is likely that the panel will be reviewing the contractor’s complete crane and hoist safety program, and will be paying close attention to the crane and hoist inspection reports, and operator training related to the crane in question. As part of the investigation, OSHA will likely be asking questions similar to the following in relation to the contractor’s truck mounted cranes with greater than one (1) ton capacity:

1. **Were the cranes being inspected on a frequent (typically monthly) basis?**
2. **If so, was the person performing the inspection looking for the following items:**
  - ☐ Malfunctioning of safety devices and operational aids
  - ☐ Wear or distortion of the wire rope or chains
  - ☐ Deformation of the hook or a missing or malfunctioning latch
  - ☐ Signs of electric motor malfunction (excessive dirt or deterioration)
  - ☐ Signs of leaks or deterioration in the hydraulic system
  - ☐ Malfunctioning of the limit switch
  - ☐ Wear on the control action components
  - ☐ Presence of load rating charts
  - ☐ Rope reeving
3. **Were any deficiencies found during the inspection examined and was a determination made as to whether they constituted a safety hazard?**

Once OSHA’s investigation is complete, there will likely be important lessons that we can learn about crane and hoist safety. In the meantime, as OSHA continues to look into the cause of this tragic accident, it is important that BWSO employees continue to visually check any hoisting equipment, particularly cables, prior to operating cranes and hoists. Although BWSO’s truck mounted cranes are inspected monthly by Fleet, it is still the operator’s and field supervisor’s duty to check and be aware of the condition of the equipment. Report any questionable conditions to your supervisor.

**Congratulations to:**  
**Manhattan Repair**  
*for achieving a high level of EH&S compliance and for their*  
**OUTSTANDING PERFORMANCE\***  
at their OEHS EH&S AUDITS

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

.....

**Congratulations to:**  
**New Clove Pump Station**  
*for consistently maintaining a low number of audit findings, and for their*  
**EXEMPLARY AUDIT PERFORMANCE RECORD\*\***  
at their OEHS EH&S AUDITS

\*\*Based on maintaining their total number of audit findings at five (5) or less at each subsequent audit.



## Are You Getting Enough Sleep?

*"The average person needs about 7 or 8 hours of sleep a night."*



Do you ever cut back on your sleep because you stay up late to catch your favorite television show or to take care of household chores? By skipping a couple of hours, you are disrupting your body from being fully energized and alert for the next day. The average person needs about 7 or 8 hours of sleep a night. During sleep, the body is able to regenerate itself, which is critical for maintaining vital body systems such as the nervous and cardiovascular systems. A lack of sleep can lead to poor health and aggravation of certain health problems that you may have or may not even be aware of. On the other hand, it is also possible to get too much sleep. Adults who sleep more than 9 hours a day may suffer from depression or some other type of illness.

Many adults do not get enough sleep or have problems sleeping. The National Institutes of Health estimates that 50-70 million Americans are affected by some type of sleep disorder. Three common sleep disorders are sleep apnea, sleep deprivation, and insomnia. These disorders can cause and/or worsen problems to your health, and the ability to carry out normal daily activities. Many additional factors may also impact the amount of sleep a person can obtain. Such factors include: a stressful or fast-paced lifestyle, taking on too many activities and responsibilities, irregular work schedules, having children or pets in the bed, body aches and pains or illnesses, and tobacco, caffeine, alcohol or any other drug use. It is important to note that the body tends to act in a cyclical manner, so consistently going to bed and waking up at a similar hour each day is critical.

By defining the cause of your lack of sleep, you may be able to improve your poor sleeping habits. Try to keep a daily diary of your sleep patterns to help determine what keeps you from sleeping. Establishing a standard waking time, as mentioned above, and following it every day of the week can help you figure out your proper bed time. In other words, if you wake up at 5 A.M. every morning, it is best to be asleep by about 10 P.M. If this is difficult, try gradually adjusting the bed time so that it will help your body become acclimated to the new schedule.

Furthermore, the bedroom should provide peace and comfort. Keep it quiet and dark. Add heavy window shades or an eye mask and ear plugs if the light or noise is bothersome. If you have severe sleeping problems such as sleep apnea, sleep deprivation or insomnia, seek professional help. Be cautious with sleep medications; long term use may result in dependency or side effects such as dizziness or daytime sleepiness. Please consult with your healthcare provider before taking any medicines and never take another person's prescription medicine. And remember, a good night's sleep is the first step towards a better day tomorrow!

## Environmental Health and Safety Word Search

T	A	G	O	U	T	D	H	Z	T	R	S	K	U	G	L
H	S	P	K	W	W	Q	A	G	V	N	D	L	X	H	I
S	X	A	T	H	A	C	F	D	O	N	C	C	A	Z	R
C	D	I	F	K	T	S	H	I	Z	L	R	Z	I	M	E
I	O	G	I	E	Q	B	T	S	C	F	A	E	O	J	C
T	W	R	L	G	T	U	P	E	G	R	Q	P	L	C	Y
R	T	S	K	J	L	Y	B	K	D	Z	E	Y	K	Y	C
E	I	J	R	L	O	V	N	F	I	S	R	T	R	A	L
N	D	U	O	E	I	L	O	C	K	O	U	T	A	T	E
C	U	P	F	C	R	F	X	C	M	Y	L	Q	E	W	P
H	A	B	O	Y	T	A	Y	E	R	S	I	X	B	E	A
M	Q	G	J	T	N	E	D	I	C	C	A	S	V	O	N

- |                                   |                                   |                                  |                                    |
|-----------------------------------|-----------------------------------|----------------------------------|------------------------------------|
| <input type="checkbox"/> ACCIDENT | <input type="checkbox"/> FORKLIFT | <input type="checkbox"/> LOCKOUT | <input type="checkbox"/> TAGOUT    |
| <input type="checkbox"/> RECYCLE  | <input type="checkbox"/> WASTE    | <input type="checkbox"/> HAZARD  | <input type="checkbox"/> POLLUTION |
| <input type="checkbox"/> SAFETY   | <input type="checkbox"/> TRENCH   | <input type="checkbox"/> WATER   | <input type="checkbox"/> AUDIT     |

*If you see something great let us know!*

Dear BWSO Colleagues,

Do you know of a colleague who went above and beyond to perform an Environmental Health and Safety task at BWSO? If so, please let us know. We look forward to hearing your stories.

Sincerely,  
The Conduit Editors

### UPCOMING TRAINING:

November-December 2009

*Office Right-to-Know*

Questions? Contact Nelson Leon  
at (718) 595-5544 or  
by e-mail at nleon@dep.nyc.gov

### TAKE THIS QUIZ: SUBMIT CORRECT ANSWERS FOR A CHANCE TO WIN A FREE GIFT CARD

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

- |   |   |
|---|---|
| <p>1. Which of the following is an acceptable method of protecting a floor or ground opening?</p> <p>A) Using wooden barricades and cones around the opening</p> <p>B) Standing next to the opening and visually guarding it while it is opened</p> <p>C) Placing a tarp over the opening</p> <p>D) Posting a sign in front of the opening that states "Caution - Ground Opening - Keep back"</p> <p>2. According to DEP's Crane and Hoist Policy, hand signals are not required if _____.</p> <p>A) Proximity allows direct voice communication</p> <p>B) Telephone, radio, or equivalent is used</p> <p>C) The operator does not require a signal person or crane follower</p> <p>D) All of the Above</p> | <p>3. Sleep apnea is a sleeping disorder in which:</p> <p>A) A person requires excessive amounts of sleep (10 or more hours a night)</p> <p>B) The eyes remain open while asleep</p> <p>C) Breathing repeatedly stops and starts</p> <p>D) None of the above</p> <p>4. The NYC Fire Code now requires that flammable and combustible liquid motor fuel portable containers have no more than a _____ gallon capacity.</p> <p>A) 5      B) 7.5      C) 2.5      D) 2</p> |
|---|---|

Answers for August 2009 Newsletter Quiz: 1) D 2) A 3) B



# A Closer Look at the Construction Laborer Career at BWSO

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*We'd love to hear  
from you!*

E-mail us at:

BWSOEHS\_suggestions@dep.nyc.gov



### *Why did you choose a career at the DEP?*

I thought the Construction Laborer position was a great fit for me since I have always liked working with my hands. I also saw the opportunity as a stepping stone, and as a way for me to take care of my mom.

### *What is your role at the DEP?*

I am an Apprentice Construction Laborer. I'm currently going through my two (2) year apprenticeship, and have already worked at Brooklyn Water & Sewer Maintenance yards. Now, I'm learning here at Brooklyn Repair. So far, I have learned how to shut gates, fix main and sewer breaks and ground service lines, write-up work orders, clean manholes, investigate sink holes and street depressions, flush sewers, clean and repair catch basins, install and repair hydrants, and participate in excavations.

### *What do you enjoy the most about your current job?*

Getting to know the people I work with. Learning more about the job is always exciting. And, I like making the guys laugh!

### *What were your expectations for the job and to what extent were they met?*

When I first started, I thought I was just going to have one particular job, but now I know to be prepared for the unexpected when we go out into the field.

### *What was your most memorable experience at DEP?*

My most memorable experience occurred on Bedford Avenue

***I've always been conscientious about my job, and I can always say that I've performed to the best of my ability. My name is Thomas Pastorino. I've been working at DEP for 28 years, and will be retiring in January 2010. I've been very happy here as a Construction Laborer...***

### *Why did you choose a career at the DEP?*

I was interested in construction work, because I had experience with it before DEP, and I really liked the physical work.

### *What do you like most about construction work?*

The thing I like the most is working outdoors, even during the really hot and cold temperatures. I'm not an office person.

### *What do you enjoy most about your job?*

You know what I like about it...when I go to people's houses, to check their water lines... I know this is going to sound funny, but I like seeing their dogs! I have two dogs myself, a Pug named Mush and a Chihuahua named Sapphire.

### *What is your most memorable experience at the DEP?*

Caulking a joint inside a chamber on Canal Street, because we were joking around and having a good time that day. Me and Bill Martino; he was a Pipe Caulker and a good guy... I worked with him at Brooklyn Repair. Also, putting my first hydrant in on Todt Hill Road.

### *What is the most challenging job you have had here?*

There was a shut down over in Brooklyn, but not a complete one, and I had to pour a joint for a hydrant gate. It was challenging because the lead had to be a certain temperature and pigeon blue color. That was how you knew it wasn't too hot. You also had to pour it at a certain speed so that it would go around the joint the right way. The job was also challenging,

***Everyday I wake up glad knowing that I have this place to come to. My name is Quincy Peli. I'm an Apprentice Construction Laborer at the BWSO Brooklyn Repair yard. I'm a year into the job, and I think I'm going to be here for a long time...***

and Rogers Avenue in Brooklyn when a truck unexpectedly fell into a hole. The street had a depression, and when the truck drove over the street, it created a hole. The truck was fine. The hole was dye tested, and a contractor was called out to the site to fix the street afterwards.

### *How does a street depression occur?*

When there is a water leak, the water travels under the asphalt and weakens the dirt underneath, which creates a street depression.

### *What is the most challenging job you have had here?*

The most challenging job I have had at the DEP took place yesterday, October 1, 2009. Our crew went out to fix a street leak; however, after setting up the shoring, the situation ended up being a main leak.

### *Who do you admire the most and why?*

I admire my grandfather and my grandmother for taking care of me, and disciplining me. From DEP, Daniel Bollaert - I admire him because he treats us, laborers, fairly. I also admire Jaime Berkeley - who pushed me to succeed in my current role, and Curvin Hamilton, William Maggiulli, and Rebon Brathwaite for challenging and motivating me.

### *Where do you see yourself in 10 years?*

If I am still at the DEP, I hope to be a District Supervisor. For my career plan, I plan to go back to school to be an architect.

### *Do you have any advice for your colleagues?*

If someone is trying to give you good advice, take it.



because there was a good amount of water coming out when I did it that day.

### *Would you change anything about your job?*

I wouldn't change anything. I'm very happy with my job.

### *Who do you admire the most and why?*

My mother. She raised me and my brother as a single parent. I admire her for everything she did for us to have a comfortable life.

### *What do you plan to do after retiring?*

I want to buy a Mustang and cruise around a lot! And, ride my motorcycle, and take my dogs to the dog park. All the fun things you can do when you retire... Also, I'm not sure, but knowing the way I am, I may get a part-time job or something or maybe volunteer at a dog pound.

### *What do you consider your greatest achievement?*

My greatest achievement at DEP is the knowledge I have received through the job.

### *Do you have any advice for your colleagues?*

Try and learn as much as you can, and do your best. Pick the mind of the experienced workers, because they know all the tricks to the trade. And, make sure you're safe!