The Conduit: EH&S NEWS FOR BWS0

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



July 18th, 2007—Con Edison Steam Pipe Explosion site near Grand Central Terminal at Lexington and 41st. The eruption left a 25-foot crater in the street; debris spread over a multi-block area, and wrecked a tow truck in the middle of the hole.



BUREAU OF WATER & SEWER OPERATIONS ENVIRONMENTAL HEALTH & SAFETY DIVISION

LESSONS LEARNED from Con Edison Steam Pipe Explosion

BWSO, Environmental Health and Safety Staff

December 2007-

A large underground steam pipe shattered in the middle of rush hour on Wednesday, July 18th, 2007, and it was no tiny disruption for New York City. The Con Edison Steam Pipe explosion took place near Grand Central Terminal at Lexington and 41st Street. The break occurred in close proximity to a water main, the result being a blast of steam, water, and debris shooting hundreds of feet into the air. The eruption left a 25-foot crater in the street; debris spread over a multi-block area, and wrecked a tow truck in the middle of the hole.

While most people were running for their lives, several of our BWSO employees were going towards the calamity to respond. For this, our thanks go out to all BWSO colleagues who responded in the heat of this incident...we have all learned together how to improve emergency response practices, which will ensure an even more efficient response in the future.

As the emergency on-call EHS Specialist for the July 2007 response, Marc Blaise reported to the scene. Marc's charge was to ensure that a safe environment was maintained for BWSO personnel. Marc's major concern was the possible contaminants within the debris, steam and dust.

Continued on page 2

Welcome to the Conduit

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

"In October the Federal Monitor reported to the court that supervision of BWSO and BWS has ended: a statement each and every BWSO employee should be proud of." James J. Roberts, P.E.

December 2007-

Welcome to the inaugural edition of the Conduit. It is an honor to introduce BWSO's newest tool for fostering dialogue on Environmental Health and Safety issues. This is an exciting time for the Bureau. In October the Federal Monitor reported to the court that supervision of BWSO and BWS has ended: a statement each and every BWSO employee should be proud of.

At the same time we celebrate our accomplishments, a sustained commitment to our compliance efforts is essential. Building the foundation of training, programs, and policies was a Herculean task. Yet, in many ways, maintaining compliance is at least as formidable an endeavor, one that requires the continued diligence

of each of us, working together towards a common goal, embodied by our commitment to the very best EHS program in the Agency.

EHS leadership, under Director Persis Luke and her staff, is exemplary. Safety Officers and Responsible Managers are essential to support our progress by providing the necessary EHS leadership at all BWSO facilities and work operations. None of us can do it alone. We will continue to learn and grow as our EHS program matures. Please understand that the support you need to do your jobs safely and effectively is there. If you need help understanding a policy or regulation, don't hesitate to pick up the phone to call a supervisor, or an EHS representative. Your EHS staff is

knowledgeable and dedicated to working collaboratively to help you do your job safely.

I encourage you to use this forum to learn and share your experience with your fellow workers. This is your newsletter. Its success will center on the willingness of all of you to participate and share your thoughts and insights. We need your thoughts, ideas and suggestions.

Thank you for all the great work to date. Working together, I am confident that BWSO will have continued success and be the model by which all others are measured. Please be sure to let me know what you think.

Respectfully yours

James J. Roberts, P.E.

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LOVE YOUR iPOD?

Beware—Article on page 2.





LESSONS LEARNED at Con Edison Steam Pipe Explosion Site continued

"I arrived at the steam explosion site about one hour after receiving the emergency call from my supervisor, Fred Chyke-Okpuzor," Marc Blaise said. "Upon arrival, I met with a BWSO Field Operations Supervisor who informed me that DEP work crews had already begun shutting down water valves on the outer perimeter of the hot zone in order to reduce water flow into the crater," Marc added. (The hot zone, also referred to as exclusion zone, is the area where contamination is either known or expected to occur and greatest potential for exposure exists). Marc met a three member BWSO crew that had just finished shutting down the last water valve. "All three men were wearing their N-95 dust masks," Marc reported. (N-95 masks are protective for asbestos fibers under these circumstances). The crew then joined the other BWSO staff on stand-by in the support zone (the uncontaminated area around or away from the hot zone). It is always unsafe to enter any emergency response area until environmental monitoring, sampling, hazard assessments, PPE assessments and exclusion zone demarcation has been completed and the OK given by Incident Commander or DEP supervision.

EHS Specialists Grabarnik, Blaise and Park spent a total of 71.5 hours at the site of the explosion within the first week. This pales in comparison to the hours put in by BWSO field crews! The NYC Office of Emergency Management (OEM), as the Incident Commander, was responsible for briefing all participating agencies on the safety of the site, hazard assessments and PPE requirements for entrance into the hot zone.

The number one concern for the City was the

possibility of airborne asbestos. Like many older pipes, this one was wrapped in asbestos for insulation. Both Con Edison and DEP Hazmat conducted asbestos sampling within the interior and exterior of the hot zone. All of the 20 bulk samples (debris) collected by Con Edison tested negative for asbestos. Of the 77 bulk samples collected by DEP HAZMAT, 3 tested positive. Con Edison also collected about 1500 air samples between July 18th, 2007 and September 19th, 2007, all of which tested negative for asbestos. Air samples collected by DEP HAZMAT between July 18th and September 19th, 2007 also tested negative for asbestos.

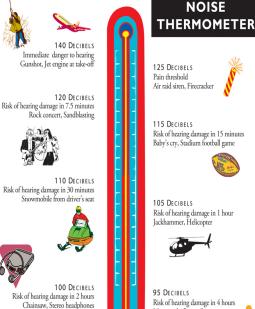
The cloud of steam observed at the site more than likely soaked down any airborne asbestos fibers or other potentially hazardous compounds, and caused them to fall to the ground. This "wetting" of asbestos fibers in the air greatly reduces or eliminates the risk for inhalation exposure and provides an explanation as to why all of the air samples tested negative. This is significant since it is airborne inhalation of asbestos fibers that causes disease.

Con Edison's steam pipe system is the largest in the United States. It contains 105 miles of steam mains that run under the streets of New York City, south of 96th Street. The 24-inch pipe was part of an underground network used by the Con Edison Steam Business Unit to heat and cool many buildings in Manhattan. Most of these pipes are wrapped in insulation that contains asbestos.

For more information go to: http://www.nyc.gov/html/oem/html/news/07_25_07_summary_steam_e

LESSONS LEARNED: Con Ed Steam Pipe Explosion

- 1. Nobody should go into areas that might contain inhalation, or other hazards until those hazards have been characterized and appropriate PPE has been assigned by EHS or other designated expert.
- 2. BWSO is establishing an incident response system to enhance communication and efficiency of our field response. A BWSO emergency coordinator will be designated by the Deputy Commissioner to control communication with the Agency Coordinator and the Incident Commander (in the case of a multi Bureau or Multi Agency response (Unified Command).
- 3. EHS is evaluating options to allow BWSO to better respond to such incidents in the future. This will enable us to determine the feasibility for Field Operations managers and/or employees to be included in a respiratory protection program. The goal is enhance worker safety and allow the bureau to carry out its duty to assess, control and mitigate damage to NYC's critical infrastructure.



90 DECIBELS

Risk of hearing damage in 8 hours Lawn mower, Truck traffic

Risk of hearing damage in 4 hours Motorcycle, Power Saw

Beginning of OSHA regulations







Potential Hearing Loss Due to iPod Use

BWSO Environmental Health and Safety Staff

December 2007--

Have you ever decided to cover-up surrounding office chatter by cranking up the volume on your iPod?

Without a doubt, there are benefits to having an iPod handy: it holds thousands of songs, and plays for hours, but it can also deliver sound loud enough to drown-out a jackhammer!

Please beware -- "the ear bud-style headphones packaged with Apple iPods and MP3 players can cause serious hearing loss," Dean Garstecki, a Northwestern University professor and audiologist said.

"Ear-bud headphones, the type that rest inside the ear, can lead to permanent damage after just an hour of high-volume music in the 110-120 decibel range, equivalent to the noise level of a concert," Garstecki said.

Noise-induced hearing loss occurs with exposure to high volume over time. Hair cells responsible for transmitting sound impulses can die off when not given sufficient chance to recover. Extended iPod listening increases these chances. Although some hearing loss is normal due to age, we can speed the aging of our ears unnecessarily with prolonged, highvolume iPod use.



What's wrong with this picture?



Picture from unews.com

"Ear-bud headphones, the type that rest inside the ear, can lead to permanent damage after just an hour of high-volume music in the 110-120 decibel range, equivalent to the noise level of a concert."

-Dean Garstecki

But How Loud is too Loud?.. How Long is too Long?

"Listening to the iPod at full volume is not recommended because it increases the risk of hearing loss after only a few minutes," says Jenny Lai, Occupational Health and Safety Specialist here at BWSO EH&S.

Sound levels of 85 decibels (dB) or louder can damage hearing, and iPods with ear-bud style headphones frequently produce sounds above 100 dB.

Audiologists Brian Fligor and Cory Portnuff created guidelines with maximum listening times using the National Institute of Occupational Safety and Health's (NIOSH) recommended exposure limits.

These guidelines pertain to iPods and other portable music players, depending on the type of earphones used. According to Fligor and Portnuff, "individuals can listen to the iPod with the supplied ear-bud headphones at 70 % volume for 4.6 hours without risking hearing loss.

Too minimize hearing loss, current research suggests that we should seek quiet environments, listen no more than an hour a day, switch to over-the-ear headphones, and dial down the volume on iPods to "6" or lower.

The next time you decide to turn on your iPod or other portable music player with ear-bud style headphones, please use this knowledge and listen responsibly.

http://www.sciencedaily.com/releases/2005/12/051216191834.htm

Strange But True!

Strangefacts.com

It takes glass one million years to decompose, which means it never wears out and can be recycled an infinite amount of times!

Over 2500 left handed people a year are killed from using products made for right handed people!

A toothpick is the object most often choked on by Americans!

Apples are more efficient than caffeine in keeping people awake in the mornings!

Most lipstick contains fish scales!



http://www.inart.psu.edu/homepage/images/gr een_apple_01.jpg

Picture from J.J. Keller & Associates, Inc. Keller Online.com TYTLICFAI TYTLICFAI EPAZHWRO AESSTOB PELASRUG RRSEVEROI ANSWER: Hint: PPE

Dirty Towel Causes Major Headache! By BWSO EH&S Staff



How can a single towel be such a nuisance? Let us consider a common scenario; Bob has just finished repairing a pump at his facility. He uses degreaser to clean off the oil and throws the soaked rag into the oily debris drum. What's the problem? Degreaser is not oil. It can even be considered a hazardous waste. By placing a single towel contaminated with hazardous waste in the oily debris drum, Bob has just caused the entire drum to be classified as hazardous waste. As a result the safety officer at Bob's facility has to move the drum to the hazardous waste storage area, re-label it, and so on. This is an example of a simple action causing a chain reaction and in the end, a major headache.

Ask the Safety Guru

J.J. Keller & Associates, Inc. KellerOnline.com

Dear Safety Guru,

Some months back, my facility received a large shipment of household bleach. I know bleach is a corrosive so I am a bit concerned about safety at our yard. Is there a quantity of corrosive chemical that triggers the requirements to have an eyewash/shower?

Signed, Facility Safety Guy



www.vallen.com/services/images/Eyewashp.jpg

Dear Facility Safety Guy,

No, there is no threshold quantity of corrosive material that triggers the requirement, OSHA says in February 27, 2007, Letter of Interpretation. The determining factor for the application of the eyewash/shower standard is the

Please e-mail your questions to BWSOEHS_suggestions@dep.nyc

possible exposure of an employee to injury from contact with a corrosive material, OSHA says.

And, in a May 5, 2004, Letter of Interpretation, OSHA says that, as the standard states, an eyewash and/or safety shower is required where an employee's eyes or body could be exposed to injurious corrosive materials (as indicated by the Material Safety Data Sheet (MSDS) for each product).

-Safetu Curu

What's New at BWSO EH&S?

By Persis Luke, Director BWSO EH&S

I can honestly say that BWSO is one of the most dynamic and interesting places I have worked. I mean that in the best way possible! One of our recent additions is a formal employee EHS suggestion program.

In the summer of 2006, Reservoir Operations started an employee suggestions program as an integral part of the Employee Participation element required by the Risk Management Program. In the Spring of 2007, a similar suggestion box program was expanded to all Field Operations locations. Effective January 1, 2008, we will be expanding this to all BWSO facilities.

All suggestions from the boxes will be collected by Responsible Individuals or designee at least twice a month. They will be forwarded to Karen De Vito, EHS Program Development Manager. With the assistance of one of our computer whizzes, Jenny Lai, we have set up an employee suggestion tracking system. All suggestions will be entered into the database, forwarded to appropriate personnel for resolution, and progress tracked by EHS staff. Suggestions that are not EHS related will be logged into the system and then passed onto the appropriate Bureau/Agency party for resolution.

In addition to the physical suggestion box program, there are other ways for you to send us your ideas. There is an EHS suggestion coupon in each issue of The Conduit (see page 4) that can be mailed in. A third option is email. BWSO EHS is also setting up an EHS suggestion e-mail box. It is BWSOEHS_suggestions@dep.nyc.gov.

It is our hope and expectation that this more formalized avenue of communication will enhance accountability and responsibility on all sides (including EHS) and provide a mechanism by which your suggestions can be given the consideration and attention that they inherently deserve. A suggestion program is only good if suggestions are considered, decisions about such communicated back to employees, and solutions implemented to the extent practical. All decisions and progress on resolving suggestions/issues will be communicated back to the facility and posted. Suggestions may be anonymous.

So please give us your ideas! If you have questions about this program, please call Karen De Vito at (718) 595-5343 or Persis Luke at (718) 595-5266

TAKE THIS QUIZ: THE FIRST THREE PEOPLE TO SUBMIT CORRECT ANSWERS AFTER 9am, JANUARY 2nd, WILL WIN FREE DUNKIN DONUTS GIFT CARDS!

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

- 1) According to OSHA, which of the following is NOT an acceptable protective support system for an excavation?
- A. Sloping
- B. Benching
- C. Plastering
- D. Shoring
- 2) Which of the following characteristics is a RCRA hazardous waste characteristic?
- A. Ignitable
- B. Radioactive
- C. Inorganic
- D. Rancid
- 3) Asbestos insulation that is considered damaged and is in need of abatement is called:
- A. Pliable
- B. Friable
- C. DACM (Damaged Asbestos Containing Material)
- D. None of the above

Have an EH&S question? Please write to us! We'd love to hear from you!

NYC Department of **Environmental Protection**

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Marc Blaise My life as an Occupational Health and Safety Specialist...



Marc Blaise, Occupational Health and Safety Specialist, BWSO EH&S

Q: Can you tell us a bit about yourself and your career at the Department of Environmental Protection?

Q: Where are you from? A: I am from Port-au-Prince, Haiti.

Q: Where did you attend school?

A: I came to the U.S. after finishing high school, and studied Chemical Technology at New York City Technical College. Afterwards, I attended Hunter College for my Bachelor's in Chemistry and later got my Master's there in Environmental and Occupational Health Sciences.

Q: Any hobbies and/ or interests?

A: I love soccer especially the Brazilian team. I also like reading good books. I'm currently reading "The Age of Turbulence: Adventures in a New World" by Alan Greenspan, the former chairman of the Federal Reserve Board. It's about global economy.

What made you choose a career at the DEP?

A: Well, I worked with Alex and Fred (Alexander Grabarnik, Fred Chyke-Okpuzor) at the NYC Department of Health, and kept in touch with them

Marc Blaise joined BWSO EHS division in September, 2006. He is a busy Health and Safety liaison for the Pumping and Groundwater Operations. Prior to coming to DEP, Marc was a Public Health Inspector with the NYC Department of Health and Mental Hygiene. He played a critical role in protecting NYC residents, particularly children, from residential lead hazards. Marc has a BA degree in Chemistry and an MS degree in Environmental and Occupational Health Sciences; both from Hunter College. Marc is well regarded by his DEP peers and known for his responsiveness and thoroughness when responding to EHS concerns! Marc was born in Haiti and currently resides in Jamaica, NY.

Know a BWSO employee committed to EH&S who we should profile in the next issue? Let us know!!

after they left. Whenever we talked, they would both tell me about how exciting it was to work for BWSO EH&S. In the early summer of 2006, I found out that there was an opening for a Health and Safety Specialist at BWSO EH&S, so I sent my resume, was interviewed, and got the job!

What is your current job title and your responsibilities?

A: I am an Occupational Health and Safety Specialist. I provide health and safety guidance to staff at our facilities to ensure that BWSO remains in compliance with applicable City, State, and Federal regulations. I also respond to on-call emergencies, conduct job safety analyses, and industrial hygiene assessments.

Q: Prior to working at the DEP where did you work?

A: (Laughs) I had several odd jobs in and out of school. I worked as a busboy at the Sizzler, a newspaper deliverer, a parking attendant, an airplane fueler at JFK airport, a chemist at Vitex (a biopharmaceutical company), a Health Inspector, then later on, a supervisor at the Department of Health and Mental Hygiene Lead Poisoning Prevention

Q: What do you enjoy the most about your current job?

A: I like the fact that my job is very challenging. It's a great environment conducive for knowledge seeking individuals like myself. This job offers me the opportunity to use my current skills and grow professionally.

Q: Have you achieved and/or met your career goals? If not, how satisfied are you in your career?

A: I believe I met my goals here at the DEP. I am satisfied and believe I'm on the career path I was meant to be on. I have had the chance to learn about many aspects within environmental health and safety field.

Q: What do you consider are your greatest achievements?

A: One: My two daughters, because they are the greatest joy of my life. Two: My education, because it was very challenging for me to work fulltime, and go to school full-time. It was not easy coming from a foreign country and not having my parents here to provide support and motivation.

Please send us your feedback on this newsletter and/or general EH&S suggestions.	FROM:	OFFICE MAIL
	NYC DEPARTMENT OF ENVIRONMENTAL HEALTH AND SEW ENVIRONMENTAL HEALTH AND S9-17 JUNCTION BOULEVARD FLUSHING, NEW YORK 11373-10 Attn: Jenny Lai, 3 rd Floor Lock	ER OPERATIONS D SAFETY 3 RD FLOOR LOW-RISE 5108