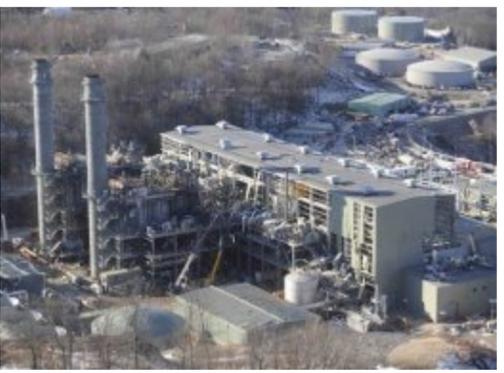




# The Mulvaney Pipeline

## Plumbers In Harm's Way

The recent explosion at the new Kleen Energy Systems electric generating plant in Middletown CT underscores just how dangerous the construction trades can be.



You may recall the Milford Power plant boiler building collapse that occurred in February 2000. The resulting chain reaction caused two fatalities with others being seriously injured. Although these two accidents occurred at new power plant construction sites, construction accidents are not limited to power plants. Unfortunately, no construction site is immune to devastating events. Three construction trade groups fall within the top ten most dangerous job categories in the United States. While we at Mulvaney Mechanical have been blessed with never experiencing a workplace fatality, we are ever vigilant to the exposures our tradesmen face each day.

The tragedy at the Kleen Energy site took the lives of some of our fellow tradesmen. Of special note, the tragedy claimed Raymond Dobratz, the uncle of Mike Heck, our service technician. When disaster hits, we all take a moment to honor our fallen brothers.

## Shipboard Facts and Statistics



- Almost half the passengers on the HMS Titanic were to sail on other ships but were put on the Titanic due to a coal shortage in England.
- A one way ticket on the Titanic cost \$4,350 for first class and \$30. for 3<sup>rd</sup> class. Today a first class airline ticket is \$5,745 with an economy class ticket at \$312.
- The aircraft carrier emerged with the first plane leaving the deck of the U.S. Navy sea cruiser Birmingham in 1910.
- The first true aircraft carrier was the Yorktown which weighted in at 25,000 tons fully loaded. Today's carriers are 3 or 4 times larger, weighing over 100,000 tons.
- The U.S. had 31 aircraft carriers fighting in WWII. The U.S. currently has 12 aircraft carriers in service, ten of them nuclear powered.
- Nimitz class flattops are 104,000 tons. The biggest foreign aircraft carrier is the Russian Admiral Kutzenov at 43,000 tons, half the size of a Nimitz class carrier.
- The oil tanker Jahre Viking, which is 1,503 feet long and 226 feet wide is the largest ship in service today. It has a gross tonnage of 565,000 tons!
- There are over 50,000 merchant ships currently registered for ocean going transport.

## AIRCRAFT CARRIERS

A Plumbers Dream or a Nightmare?

You don't have to look far to find hundreds of piping applications and systems that plumbers must work on. Residential has its own systems, hospitals, research and development firms, commercial and industrial have yet other types of systems. The Kleen Energy plant that was the site of the most recent disaster is just another application of diverse piping systems designed to fulfill a specific functional application.

If you were to try and find a single project that contains all aspects of plumbing, piping and mechanical systems, you need look no further than a Navy Warship. More specifically, an aircraft carrier is the largest most complex warship of all. Aircraft carriers contain just about every type of piping and plumbing system that exists. It is truly a self-sustaining microcosm of a modern city including housing, retail stores, restaurants, hospitals, an airport, and much, much more.

There are no fewer than 30 specialized software programs needed to design and layout these mechanical systems. ISO standard 10303-227-1999 is one of many management systems governing the design and installation of shipboard mechanical systems. Routine potable water and restroom facilities are made far more difficult than their land based cousins, by the movement of the ship, the corrosion factors at sea as well as the need for backup and double backup systems. Most carriers have two complete nuclear power plants fueled for 20 years of propulsion and support utilities power. Steam generated by these power plants is not the same steam Grandma used to heat her house. The power plants generate ultra high pressure, superheated steam which is then used to drive the main propulsion turbines as well as the power generators. Then there is the matter of gas piping and hydraulic systems inter-dispersed with all the other dissimilar piping systems. Warships are truly a plumbers dream, which often becomes a nightmare.



- Women's bodies reject heart transplants more often than men's.
- Calorie counting for losing weight first became popular in 1918.
  - In Malaysia, drunk drivers are jailed, so are their spouses.
  - 60% of all heart attack victims survive the attack.
- 90% of all airplane collisions occur while still on the ground.
- Lightning is fast enough to circle the globe 8 times in a second
  - Plants, like people, run fevers when they're sick.
- For every 10 people who try climbing Mt. Everest, one dies trying.
- 25% of vets in the UK report treating a drunk dog in their practice.
- Charles Richter, father of the Richter scale for measuring earthquakes was a nudist.
- Bowing to pressure from antismoking groups, Hasbro took away Mr. Potato Head's pipe in 1987.

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## NEW U.S. EPA REGULATION REQUIRES CONTRACTORS TO BE LEAD CERTIFIED

Contractors who work on homes, schools, day-care facilities or other structures built before 1978 and occupied by children must be trained and certified in accordance with the U.S. Environmental Protection Agency's Lead Renovation, Repair, and Painting regulation by April 2010 or face fines of up to \$37,500 per day. The rule applies to contractors- plumbers, painters, electricians, renovators, maintenance personnel-who may perform work on a structure that could involve removing or otherwise disturbing lead paint on the structure. All contractors affected by this regulation must be trained and certified under this new program, including those who have had previous lead abatement training.



**WHAT THE HECK IS IT?**  
If you can name the item pictured, you may  
**WIN A MULVANEY MECHANICAL LEATHER JACKET**

If you e-mail your entry, you must write "NEWSLETTER CONTEST" in the subject line to avoid our SPAM filter. Please mail to [janette@mulvaneyinc.com](mailto:janette@mulvaneyinc.com)  
If multiple correct answers are received, a winner will be selected at random.

**\*JUST LIKE THIS ONE!**



## The Economy vs. The Contractor

### Eight ways to deal with the stagnant economy

- 1- Toss the Old Construction Cost Data Books.**  
Unless you subscribe to streaming Building Construction Cost Data or have a crystal ball, construction budgeting is more of an Art than a Science than it has EVER been.
- 2- Contracts Should Include De-Escalation Clauses.**  
De-escalation clauses in contracts, along with escalation clauses place contractor and customer on a more even scale. Much of this makes for an increased, but necessary, bookkeeping effort.
- 3- Competition is Fierce while Material Markets are Uncertain.**  
Fees and profit margins are being cut by some contractors. Competition is getting fierce, especially for any "real" project.
- 4- Tight Credit Markets are Straining Relationships.**  
The financials of all parties are receiving much greater scrutiny than ever, as are the contracts for construction. There are reports throughout the industry of projects that have been suddenly stopped mid-construction, holding up payments due, and putting contractors, subs and material suppliers in financial jeopardy.
- 5- Change Orders Need to Be More Scrutinized.**  
Change Orders are receiving much more scrutiny on all projects. This goes directly to first making certain that all A/E plans and specifications are reviewed and vetted completely for constructability and coordination issues.
- 6- Anticipate Payment Defaults.**  
Contractors must be aware and take steps to guard against payment defaults by principles. Subcontractors depend on primary contractors to protect them from defaults and to have a plan in place to handle this possibility.
- 7- Performance & Payment Bonds Are the Rule Now.**  
Requirements for Performance & Payment Bonds are the rule rather than the exception now. The slow economy dictates caution on all parties.
- 8- Mitigate Project Risks with an Experienced Owner's Rep.**  
Working with an experienced Owner's Representative in this climate will ensure that your project is well managed, stays in budget and on schedule. This is something that will be a value to all concerned.

## Quotes on the ECONOMY

- "Economy is half the battle of life. It is not so hard to earn money as to spend it well."
- "Too many people spend money they haven't earned, to buy things they don't want to impress people they don't like."
- "The economy depends as much on economists as the weather does on weather forecasters"
- "The whole of the global economy is based on supplying the cravings of two per cent of the world's population."

We received no correct answers to our puzzle from last time. The answer was a pencil sharpener. This is believed to be the 1st beveled hand crank sharpener. It used sand paper disks to create the tapered pencil point we see today.

1886 Gould & Cook Pencil Sharpener



## WHAT'S GOIN' ON?

Mar 20- 24, 2010	National Demolition Assoc.	Las Vegas, NV
Apr 2 - 11, 2010	New York Auto Show	New York, NY
Apr 6 - 7, 2010	Fluid Power Expo	Cleveland, OH
Apr 14- 16, 2010	NDRExpo 2010	New Orleans, LA
Apr 16-18, 2010	Kitchen & Bath Show	Chicago, IL
Apr 23- 25, 2010	NE Timber Frame Show	Concord, NH
May 4 - 6, 2010	National Hardware Show	Las Vegas, NV
May 11-14, 2010	CONSTRUCT2010	Philadelphia, PA
May 23-26, 2010	Wind Power Conference	Dallas, TX
May 25-27, 2010	Ecofriendly Expo	New York, NY

