

The Mulvaney Pipeline



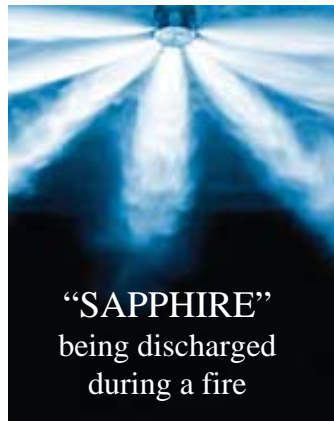
Sapphire.. the new "Waterless" Water

Sprinkler systems have been around since the 1870s and have enhanced life safety and property protection. As sprinkler systems, became more prevalent in providing fire safety improvements in the 20th century, a vast, new fire protection requirements emerged a few short decades ago. The world was discovering computers. It quickly became apparent that the reliance on computers was so critical that the loss of even one machine could be crippling to a business. How could a computer be protected from the very element (water) that was utilized to extinguish a fire? When the solution emerged the term "clean agent" evolved to describe a type of fire suppression agent that had the capability to extinguish a fire, but would not harm the contents of the room where it was located. Leaping into wide use in the 1960s was an efficient clean product named halon. All was well in the clean agent sector until, it all came crashing down with a thud in 1986. At that time, the EPA identified halon as being a contributor to the depletion of the ozone layer. Suddenly, the focus moved dramatically from protecting special hazards to protecting our atmosphere for future generations. It was the shock that came out of nowhere. The verdict on halon was swift and uncompromising. Phase-outs were initiated beginning in 1987 and by 1993, halon could no longer be manufactured. With the demise of halon, the search for suitable halon "alternatives" began in earnest and continues today, nearly two decades after the EPA banned the production of halon.

Several halocarbon and inert agents are now acceptable as primary alternatives to halon clean agents. These include HFC-227ea, HFC-125, INERGEN, and Argonite. While these agents have been in place for more than a decade, the search for alternatives has continued. Any new candidates must prove that they are environmentally friendly, safe for minimum human occupancy and, of course, they must prove conclusively that they can put out fires. After almost a decade without any significant new alternative clean agents, 3M announced the launch of a unique fire suppression system. 3M engineers developed the SAPPHIRE total flooding system that was powered by the 3M™ NOVEC™ 1230 Fire Protection Fluid. NOVEC 1230 fluid (C6-fluoroketone) is actually a chemical that looks similar to water. It is stored as a fluid in containers much like other clean agents. However, upon discharge (and pressurized by nitrogen at 360 psi), the agent becomes a gas and works as a total flooding agent. Trademarked SAPPHIRE, the system provides warnings and then discharge in just 10 seconds, thereby putting out the "fire before it has reached the flame stage. Upon discharge, the agent will do its work quickly and efficiently, without obscuring one's vision or damaging any objects or equipment in the room being protected. The fire, fortunately, has absolutely no chance to survive.

The SAPPHIRE system has zero ozone depletion potential and contains a global warming potential (GWP) of 1—which is equivalent to the GWP of naturally occurring carbon dioxide. It has an atmospheric lifetime of five days compared to 65 years for halon. And, unlike halon, it is sustainable, meaning it is so environmentally friendly that it is highly unlikely that it will ever be the subject of environmental legislation like the type that has led to the removal of halon.

Condensed from a PM Engineering article by Joe Ziemba



"SAPPHIRE" being discharged during a fire

WHAT'S GOIN' ON?

- Mar 29th - 31st - Total Facilities Management Show
Las Vegas NV
- Apr 10th - 12th TFM- Total Facilities Mgt Show
Chicago, IL
- May 13th - 18th - ASHRAE Vent 2006 Conference
Chicago, IL
- Jun 4th - 9th - 2006 NFPA World Safety Conference & Expo
Orlando, FL
- Jun 24th - 27th - BOMA Annual Conference & Expo
Dallas, TX
- Sep 7th - 11th AFSA Annual Convention
Fort Worth, TX

The Mulvaney Health Tip

1. The Japanese eat very little fat and suffer fewer heart attacks than Americans.
2. The Mexicans eat a lot of fat and suffer fewer heart attacks than Americans.
3. The Chinese drink very little red wine and suffer fewer heart attacks than Americans.
4. The Italians drink excessive amounts of red wine and suffer fewer heart attacks than Americans.
5. The Germans drink a lot of beers and eat lots of sausages and fats and suffer fewer heart attacks than Americans.

CONCLUSION: Eat and drink what you like.... Speaking English is apparently what kills you!

COAL to OIL



Coal to Oil Plant
Inner Mongolia China

The US could produce oil and other petroleum products from the billions of tons of coal reserves in North America. The process, called "Fischer-Tropsch" technology, was originally developed by two German scientists in 1923 to convert coal into petroleum products. Hitler used the process to make diesel fuel and gasoline to power German tanks and other

vehicles during World War II, when Germany was short of oil. More recently, when much of the world wouldn't trade with South Africa during apartheid, that country used the same technology to produce oil and gasoline.

The simple description for the conversion process starts with coal being crushed and heated to the gasification stage. From there, the process is primarily a chemical reaction. Cobalt or iron is utilized as a catalyst for the gasified coal. The coal gas breaks down into the building elemental building blocks of petroleum. Carbon monoxide and hydrogen is created and utilized to formulate diesel oil, gasoline, heating fuels, plastics, fertilizer or pure hydrogen. The process requires approximately 2 tons of coal to manufacture 1 ton of petroleum product.

So why hasn't anyone been using Fischer-Tropsch technology in the United States? "It's kind of been left on the shelf because the process costs more than oil has been worth up till now. If the present spiraling cost trends continue, the coal to oil process will become quite cost competitive with more traditional sources of oil. China appears to be taking the global lead in creating oil from coal due in part to the extremely high cost of oil in mainland China.

The process has become economically feasible here in the US. Many US built processing plants are now on the drawing boards. States in the forefront of the coal to oil effort are Montana, West Virginia and Pennsylvania.

COAL-TO-CLEAN FUELS AND POWER PROJECT GILBERTON, PA, USA



"My school principal was an idiot. My army sergeant was an idiot. All of my bosses have been idiots. The key to success is to be an idiot."

Have dinner on us!

Solve the word puzzle below and WIN DINNER for TWO

E-mail or FAX your answer to our office. If more than one correct answer is received, a winner will be selected at random. If you e-mail your entry, you must write "NEWSLETTER CONTEST" in the subject line to avoid our SPAM filter. The answer from the riddle last time was "North Polish". The following twelve people submitted the correct answer.

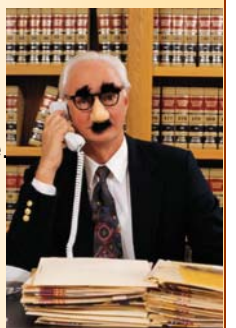
Our sincere apologies to those of you who answered our previous newsletter contest correctly and were not recognized. Unfortunately, we had problems with our main email box. Please be sure to send your answers to janette@mulvaneyinc.com

- | | |
|----------------------|----------------------------------|
| Diane Baker | Hines |
| Marty Banko | TechAir of CT |
| Shawn Dukett | Sheet Metal Workers' LU#40 |
| Ken Hill | ASML |
| Christine Moreschi | PMCA Hudson Valley |
| Tony Pirrelli | Rizzo Companies |
| Carl G. Russell | George J. Smith & Son, Realtors |
| Art Sanders | Hoffmann Architects |
| Bill Sapienza Family | Sapienza & Lessig |
| Susan Stout | Plumbers & Pipefitters Local 777 |
| Gary Tiumura | Downes Construction Co. |
| Mark Wcislo | ASML |

Those annual performance Reviews

(Here are what they really mean!)

- OUTGOING PERSONALITY** - Always going out of the office.
- GREAT PRESENTATION SKILLS** - Can talk a lot about nothing.
- GOOD COMMUNICATION SKILLS** - Spends lots of time on the phone.
- AN ASSET TO THE COMPANY** - Arrives at work on time.
- SOCIALLY ACTIVE** - Drinks a lot.
- INDEPENDENT WORKER** - Nobody knows what he/she does.
- QUICK THINKING** - Offers plausible excuses.
- PLANS FOR ADVANCEMENT** - Buys drinks for all the boys.
- USES LOGIC ON DIFFERENT JOBS** - gets someone else to do it.
- CAREFULL THINKER** - Won't make a decision.
- EXPRESSES THEMSELVES WELL** - Speaks English.
- WORK IS 1st PRIORITY** - Has no life
- METICULOUS ATTENTION TO DETAIL** - A nit picker.
- HAS LEADERSHIP QUALITIES** - Is tall or has loud voice
- EXCEPTIONALLY GOOD JUDGEMENT** - Lucky
- KEEN SENSE OF HUMOR** - Knows a lot of dirty jokes
- CAREER MINDED** - Back stabber.
- LOYAL EMPLOYEE** - Can't get a job anywhere else.
- RELAXED ATTITUDE** - Sleeps at desk.



St Patrick's Day Facts and Figures

- 34.5 million** = Number of U.S. residents who claim Irish ancestry.
- 3** = States in which Irish is the leading ancestry group: (DE, MD and NH)
- 25,870** = The number of U.S. residents who speak Irish Gaelic at home.
- 128,000** = Number of U.S. residents that were born in Ireland.
- 4.8 million** = Number of legal immigrants from Ireland admitted to the US.
- 1,500** = Avg # of immigrants from Ireland admitted to the US annually.
- \$24 Billion** = Value of imports from Ireland to the US annually.
- 41.5 Billion** = Pounds of beef produced in the US every year.
- 2.5 Billion** = Pound of cabbage grown in the US every year.
- 21.6 Billion** = gallons of beer produced annually in the US.
- 48,000** = Number of bars that serve green beer on St Patrick's Day.
- 8 Million** = Number of St Patrick's greeting cards exchanged annually.
- 93.3 Million** = Number of US residents wearing green for St Patrick's Day.



Bet You didn't Know
7% percent of the entire Irish barley crop goes to the production of Guinness Beer

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