VENTURE™

# VISION

VISION is published by Venture Engineering & Construction, an engineering company for process industries.

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## Venture Engineering Ranked Fastest-Growing Engineering Firm in Pittsburgh by PBT

On Thursday, August 26, 2010, the Pittsburgh Business Times recognized Venture Engineering & Construction as a leader in PBT's Fastest-Growing Companies survey.

Venture was ranked Number 1 in the Environmental / Engineering / Energy category. And it received Number 2 Overall.

President & CEO Dave Moniot is one of five featured on the front cover the Pittsburgh 100 supplement to PBT. Inside, each ranking nominee discusses his company's success for growth, particularly during the tough economic times.

"We kept guys on overhead for several months during the recession in order to avoid scrambling for talent when the economy bounced back," Mr. Moniot said.


Successful endeavors are usually the result of a team effort, and Venture is no exception. In our case the contributors are too numerous to mention individually.

Therefore, Venture™ extends its appreciation to the customers, bankers, and staff who made this achievement possible.

## Long Awaited TDS Ruling is Published

For over a year, Venture Engineering & Construction has followed the pending regulations from the Pennsylvania Department of Environmental Protection regarding total dissolved solids (TDS) discharge levels in Pa's waters.

We have reported via our Blog along the way and are here to update once again: the final rulemaking is published.

See Page 2 for Details

## OSHA Creates New Approach-Distance Standard for Cranes, Overhead Power Lines

OSHA published a final rule (new standard) on Monday, August 9 affecting cranes and derricks in construction. The historic 10ft rule from overhead power lines is eliminated. It is replaced by a new 20ft rule. Ninety days after publication (November 8), the standard becomes effective. This new standard, at 40 pages long, will become the new 29 CFR Part 1926 Subpart CC.

The previous rule only had requirements to maintain a minimum distance of 10 ft to overhead lines (up to 50kV) and gave little guidance for employers to implement measures to help prevent operators from inadvertently breaching the distance. For these reasons, OSHA has concluded that the old 10 ft rule was not effective in preventing these accidents and fatalities involving contact with power lines.

The standard outlines three options of programmatic requirements that must be adhered to if a crane can come within 20 ft to a power line.

See OPTIONS Page 2

In this Issue:

# TDS Discharge Requirements Set

From Page 1

Affecting new sources of TDS within the oil and gas industry, the new TDS discharge regulations are effective Saturday, August 21, 2010. The requirements are set at:

| | |
|---|---|
| TDS | < 500 mg/L |
| Chloride | < 250 mg/L |
| Barium | < 10 mg/L |
| Strontium | < 10 mg/L |

* Specific TDS limits were not included in the final rulemaking.

The announcement came in July 2009 that changes need made to permissible TDS discharge after testing at the West Branch of the Susquehanna River, Monongahela River, and Beaver River recorded record-high levels of TDS.

Since waterways have a limited capacity to dilute TDS, PA DEP performed assimilative capacity analyses to determine what TDS concentration and how much capacity certain streams have remaining.

In addition to the high TDS levels, the recent growth in gas drilling raised concerns of water quality for drinking and the ecosystem. It is forecasted that gas drilling wastewater generated will increase from 2009's 9 MGD to 20 MGD by 2011.

Under the new regulations, wastewater is not to be discharged directly to a Publicly Owned Treatment Works (POTW). In order to discharge to a POTW, the wastewater must first be treated at a Centralized Waste Treatment facility (CWT) and meet end-of-pipe effluent standards as set by the rule.

# Venture Invests in New Technology

As part of our ongoing commitment to tooling up with "best-in-class" equipment, Venture recently invested in video conferencing equipment. This will help support our remote projects and customers, which are on both coasts and points in between.

The system consists of high definition video conferencing and interactive touch-enabled LCD display. Video conferencing equipment is a Polycom HDX based system with 22kHz audio and 12x optical zoom. The video conferencing is set up in conjunction with a SMART Board interactive 16:9 aspect ratio display. Venture's video conferencing setup utilizes its 50 gigabyte internet connection for a clear and crisp high definition conferencing experience.

The benefit of the SMART Board is more than a video conferencing tool. During in-house presentations and meetings, mark ups can be added to the displayed drawing, document, etc., and the mark ups can be saved to USB or e-mailed. The SMART Board runs through select Windows operating systems and uses "digital ink."

# OSHA Subpart CC Offers Three Options to Satisfy Standard

From Page 1

The implementation of Subpart CC will depend on which one of the options is selected and will apply other OSHA standards, such as OSHA's Power Generation Transmission and Distribution Standards (1910.269) and Subpart V of 1926 construction standards. Training and general standards for employees are also included in the Subpart CC requirements.

The following is a synopsis of the three options available under Subpart CC only. The full 40-page standard can be found at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=21692

<u>Option 1</u>
"If it's not grounded, it's not dead" is the cardinal rule for electrical workers. The new standard requires a confirmation from the utility owner/operator that the power line is deenergized. Also, it must be visibly grounded at the worksite.

<u>Option 2</u>
If the crane can get closer than the 20 ft distance, additional actions are required:

- A planning meeting with minimum specified agenda items to be covered
- Non-conductive tag lines meeting ASTM standards
- Erect and maintain an elevated warning line, barricade, or line of signs
  - At 20 ft from power line
  - In view of operator
  - Equipped with flags or high-visibility markings
  - Dedicated spotter when operator cannot see elevated warning line, which requires further actions
    - Positioned to effectively see warning line in relation to crane
    - Constant, direct communication to guide operator

In addition to these, one of the following must be implemented:

- A proximity alarm
- A range control warning device
- A device that automatically limits range of movement
- An insulating link/device, with additional options to be used after one year from Subpart CC's effective date if insulating links are not Nationally Recognized Testing Laboratory (NRTL) listed

<u>Option 3</u>
The bulk of Subpart CC's rule is contained in Option 3. In overview, this option covers six main points that are detailed throughout the rule. These main points are:

1. Determine line voltage and approach distance set by rule.
2. Determine if any part of the equipment, load line, or load could get closer than specific distances set by rule.
3. Without confirmation the utility is deenergized and visibly grounded, no part of equipment, load line, or load is allowed below a power line (exceptions apply).
4. Presume power lines are energized.
5. Any nearby transmitter must be deenergized if close enough for an electrical charge to be induced in equipment/materials.
6. Training: electrocution information, safety and evacuation.

# Environmental Group Established, Led by Laskey

Jeffrey Laskey has recently joined Venture Engineering & Construction, where he will serve as the Manager of the Environmental Engineering group.

Mr. Laskey will direct the company's environmental engineering practice nationwide. This group currently supports Venture's process and installation engineering practice, but will also pursue "stand alone" environmental projects with a focus on regulatory permitting/compliance assistance, property transfers, environmental due-diligence, site investigation, and focused remedial system design, installation, and operation, including frac water treatment from Marcellus Shale operations.

Mr. Laskey is an environmental industry veteran with 25 years of experience in all facets of the industry, from small Phase I site assessments to RCRA Corrective Action projects and large Superfund site remediations.

Prior to joining Venture, he served as a Client Manager for an area firm with a large national practice responsible for all aspects of strategic planning, project capture and project delivery for its key industrial clients as well as managed the nation's first-ever Conservation Conveyance property transfer of surplus military property.

Mr. Laskey received a Bachelor of Science degree in Chemical Engineering from Grove City College. In addition, he has received his OSHA 40-hour HAZWOPER certification and his 8-hour OSHA Supervisor training.

"I would like to contribute to the continued growth of Venture as a leading engineering and design firm in Pittsburgh and sustain the momentum the company has developed in a short period of time, as evidenced by its recently being named the fastest growing engineering firm in Pittsburgh."

# Sussex County LFG to Electricity Plant is Venture's Highlighted Project

Venture Engineering & Construction is designing a new LFG to electricity plant at the Sussex Landfill in New Jersey.

The project will interface with the landfill's blower/flare system through an existing flange connection on the blower outlet piping. A new blower skid will be installed and a new pipeline will be constructed to convey the landfill gas to the project site. The gas will be compressed to a controlled pressure of approximately 10 psig via the new blower skid.

The compressed gas will be treated to remove moisture and particulate contaminant via coalescing filters and a chiller. The new blower skid will consist of one blower rated for 100 percent of the total plant capacity, pre-filter, air-cooled after cooler and chiller. The chiller will be sized to produce a gas dew point of approximately 44°F and the discharge will be reheated using an economizer heat exchanger to maintain the fuel gas temperature at approximately 20°F above the dew point (superheat). This superheat ensures no condensation in the fuel gas piping or engine. Condensate generated from the plant will be piped underground to the landfill's leachate manhole for processing.

After compression, landfill gas will be further conditioned to remove siloxanes, NMOCs and further moisture (dew point reduction) with the Venture™ regenerative gas conditioning skid. The 10 ft wide and 27 ft long skid is pictured below. The skid will be designed for continuous 24/7 operation with multiple vessels. One vessel will be online at all times, while the other vessel will be in regeneration or stand-by service. Regen waste-gases will be piped to a new regen flare to control emissions.

One thousand scfm of fully conditioned landfill gas exits the gas conditioning (siloxane removal) skid at approximately 5 to 6 psig and will be piped to the new engine gensets. The project will utilize two Caterpillar 3520 engine/generator sets, each capable of generating 1.6 MW, and a gross total output of 3.2 MW. Each engine will be consume approximately 500 SCFM of fuel.

# Smokers May Be the Most Connected

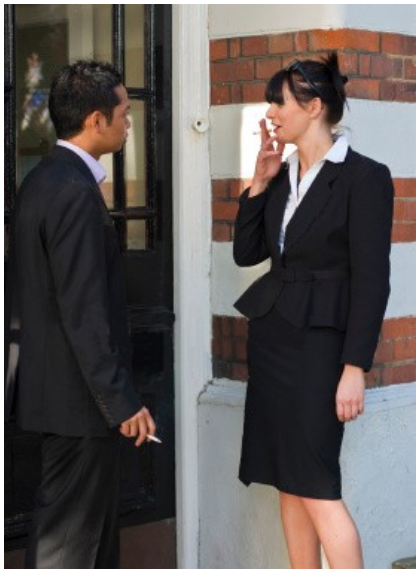
*Manager of Engineering Don Olmstead stays up-to-date and educated through literature. Whether it's industry-related, profession-related or just for enjoyment, books and articles are always filling his desk and inbox.*

*Recently, Mr. Olmstead came across an intriguing article in Mechanical Engineering Magazine, an ASME publication. From the August 2010 edition, the article is titled* Boot Camp for Entrepreneurs *by Alan S. Brown. Mr. Olmstead found it so fascinating, he couldn't help but share it with coworkers, customers fellow industry professionals. He summarizes the article below.*

In response to decreasing revenues and inability to bring new products to the market place, the Belgium office of Lucent (now Alcatel-Lucent) initiated a series of measures to stimulate generation of ideas with commercial potential. Starting with a web-based suggestion box, then an innovation contest, with increasingly lucrative prizes, Lucent realized that they needed to be more intentional and moved to self-directed teams requiring considerable time commitment. More specifically, Lucent looked for five person teams with expertise that bridged the gaps between their internal functional groups (silos) and that had chemistry.

One of the more interesting observations from Guido Petit, Director of Alcatel-Lucent Technical Academy:

> "If you look at who has the highest level of connectivity across silos, it's always the smokers. This is true in every organization. If they want to have a smoke, they go outside. There they meet other smokers from different silos. They phone each other to see if they want a smoke. It's a very social activity. That is the corporation's underground network. They're the ones who know what's going on in all the different parts of the organization. This type of informal networking is extremely important to boost innovation technical excellence. The boot camp manager was a smoker. That helped."



Next time you're looking at the smokers outside thinking they are crazy or wasting time, remember the Lucent experience. The smokers might be doing valuable networking for the organization while getting their fix. One caveat: Lucent is silent on the life expectancy of their best teams!

VENTURE™

## Venture News

### Welcome New Employees

Gary Kerr
Dustin Krasneski
Jeff Laskey
Joe Micikas
Kevin O'Connor
Jim Soukup
Jason Stojakovich
BJ Wright

## Employee News

Alyson Holler was selected Vice President of Public Relations for the Aspinwall Toastmasters Club, Toastmasters International, District 13 for 2010-2011.

### Happy Birthday!

SEPTEMBER
Carlos Caminos
Al Derringer
Matt DeStefano
Steve Kranz

OCTOBER
Mike Kennedy
Gary Kerr
Will Lowry
Don Olmstead
Alex Ussia

NOVEMBER
Travis Buggey
Steve Fleming
Renée Kalnas
Amanda Mihailoff
Tom Minsinger
BJ Wright