

THE MAGAZINE FOR THE PEOPLE WHO BUILD AMERICA

# CONSTRUCTION

TODAY

www.construction-today.com

JANUARY 2008 \$4.95

## Care in Colorado

JE Dunn completes a 'patient-focused facility.'

PAGE 136

## Making its Mark in Vegas

Marnell Corrao details its multidisciplined approach.

PAGE 38

## Hold on Tight

EllisDon enjoys a wild ride in booming Alberta.

PAGE 54





Underground gas contractor NPL Construction Co. focuses on safety in all projects.

# Safety-Focused Contracting

Phoenix-based NPL Construction Company is working to change how the industry protects the public by surfacing an underground hazard. It is working to make the industry safer, its CEO says.

BY KEVIN KEMPER

Phoenix-based NPL Construction Company says it is the energy distribution contractor that does the most underground gas work in the United States. With more than 2,500 employees and \$300 million-plus in annual revenues, NPL strives to maintain a culture of safety and quality that CEO Mike Kemper believes has propelled the company to achieve such a high level of success. NPL offers turnkey services with the intention that, ideally, its presence goes unnoticed.

NPL repairs or installs gas pipe and electric wire with follow-up surface restoration so that the job is complete in the customer's eyes, eliminating the need for the cost or coordination of hiring multiple subcontractors to finish the job and make the site aesthetically pleasing.

"We install more than 15 million feet of pipe and wire a year, and we outsource very little, so we need the skills to do the job right the first time," Kemper says.

A focus on safety and quality helps the

company succeed. With a positive safety record, insurance costs are minimized. In fact, NPL has one of the lowest insurance modification rates in the industry, with a score of 0.58. Improved safety also makes the company a desirable employer.

"Rewarding people for working safely is unusual in our industry," Kemper says. "People want to work for a company where safety and quality come before production."

These positive outcomes result from the company's actions to applaud and reward safe, quality practices. NPL has named the month of August "Safety and Quality Awareness Month," during which a focus on safety is promoted when employees meet with their supervisors to discuss safety and quality issues.

At all times of the year, new employees must complete intensive safety and quality training, and weekly "tailgate meetings" focus on specific safety issues to remind employees that, at the end of the day, their safety is more important to NPL than anything else.

A three-tiered rewards program was initiated by Kemper and NPL management in 1986. The first tier is open to all

NPL Construction Company  
[www.gonpl.com](http://www.gonpl.com)

2007 sales: \$300 million+

Headquarters: Phoenix

Employees: 2,500+

Specialty: Energy distribution contracting

Mike Kemper, CEO: "Cross-bored sewer lines are the No. 1, solvable public safety issue in our industry."

NPL employees, who are rewarded with a gift, such as an NPL travel bag or a small radio, if they complete a full year without any safety or quality issues. A more expensive gift, such as a stereo, is given to the second tier of the company, front-line foremen with a perfect safety and quality record.

The third tier is open to superintendents and above, and these gifts include cash rewards. All gifts are given out at NPL's annual safety and quality meeting each spring.

This meeting is a time to celebrate the company's successes and gives management a chance to show their gratitude to the employees in the field that are achieving such great results.

#### **Safety and Quality Throughout**

Such measures show how NPL maintains a stellar safety and quality record within the company. But NPL and Kemper are now striving to improve the safety of the entire industry.

According to Kemper, there is a safety issue facing the underground construction industry that must be solved. He be-

lieves that the solution to this issue should start within the industry, even though the problem is "first and foremost a public safety issue."

The issue that concerns him is the danger of cross-bored sewer service laterals.

It is possible for underground contractors to install utility lines directly through these sewer laterals, the pipes that connect a building's sewage system to the city's main sewer lines. A breached sewer line is called a "cross-bored line," and it can occur even with conscientious pipeline installation.

The possibility arises when using trenchless technology. There is a limited risk of breaching any utility lines – water, telephone, cable, electric, natural gas – other than sewer lines with this technology because of legislation mandating that, prior to any underground construction, utility owners/operators must come out and mark the location of their existing lines. Sewer laterals are the only pipes that are not consistently marked, Kemper says, whether from lack of proper legislation or enforcement.

The danger arises when a plumber is

called out to the building to clear out a blocked sewer lateral. Often, a plumber will use a rotary cutting device to clear out the sewer line and this will cause the implanted utility line to rupture.

The worst damage from this scenario can occur with a ruptured gas line. If gas leaks into the building and ignites, the consequences can be devastating.

NPL sees the solution to this problem in three parts: legislation, enforcement and technology.

New legislation must mandate that sewer lines everywhere must be marked, according to the same laws governing all other underground facilities.

Enforcement of existing legislation is another obvious and integral part of the solution.

Lastly, improved technology may someday prevent cross-bores. NPL is currently working with others in the industry to develop technology to locate water and sewer lines.

"We are not an R&D company, but this issue is too big to ignore, so we are partnering with others who can help us make the industry safer," Kemper says. ■