

### Lexington to upgrade sewer systems

The Lexington-Fayette Urban County Government (LFUCG) in Kentucky has agreed to make extensive improvements to its sewer systems, at a cost estimated to exceed \$290 million, to eliminate unauthorized overflows of untreated raw sewage, and to reduce pollution levels in urban storm water. In addition, LFUCG will pay a civil penalty of \$425,000 to the United States and implement two federal and two state environmental projects valued at \$2.73 million that will provide additional environmental benefits to the Lexington community.

The settlement was announced jointly by the U.S. Justice Department, the U.S. Environmental Protection Agency (EPA), and Kentucky's Environmental and Public Protection Cabinet (EPPC). The consent decree, lodged in the U.S. District Court for the Eastern District of Kentucky in Lexington, resolves the joint federal and state complaint filed in November 2006.

LFUCG owns and operates a sanitary sewer system, which includes two major wastewater treatment plants, serving a population of almost 250,000. It also owns and operates a separate storm sewer system that collects urban storm water. Discharges have adversely affected water quality in area streams, including Town Branch, Hickman and Elkhorn Creeks, Cane Run, Wolf Run and Blue Springs Branch. These streams ultimately drain to the Kentucky and Ohio Rivers.

The major features of the consent decree relating to the sanitary sewer system will require LFUCG to identify and quantify recurring discharges of untreated sewage and their causes; evaluate the capacity, design and condition of the components of its sanitary sewer system including pumping stations and treatment plants; develop and implement remedial measures to eliminate recurring SSOs within 11 to 13 years; and improve its management, operation and maintenance programs to prevent future overflows and respond to overflows when they occur.

### City's costly sewer repair

What started as a simple sewer repair project turned complicated for the city of Valparaiso, IN, when the area around Horseprairie and U.S. 30 collapsed in early March because of a leaky manhole. The city's sewer department estimated repairs would take a week at a cost of \$75,000 to \$150,000, but cost soon soared closer to \$500,000.

The company that was hired to remove the water from the surrounding soil to get to the manhole, and sewer service had to be rerouted around the site. Two major south side sewer lines fed into the spot that could not just be shut off until repairs were done.

When the sewer line was finally accessed, it was found to be badly corroded from hydrogen sulfide gas, which had caused corrosion of the manhole and is common in such situations. The pipe was supposed to be plastic, which is corrosion resistant, but it was iron.

Both the manhole and the 350 feet of pipe north of U.S. 30 were lined with a plastic sleeve that will preserve them for many years and is much cheaper than replacing them. All that work on the north side of U.S. 30, including the de-watering and the sewer bypass, cost \$375,542.

In addition, the line under U.S. 30 to the manhole on the south leg of Horseprairie also was damaged and will have to be lined. Although that section is not as badly damaged, it should be replaced this year.

The cost of that repair was estimated at between \$120,000 and \$125,000. The project could require bypassing four sewer lines that converge at the south manhole.

### CAT buys Lovat Inc.

Caterpillar Inc. has entered the tunnel boring business with the acquisition of Lovat Inc., Toronto, Canada.

Caterpillar says their products work as support machines at tunnel boring projects and will complement the electrically driven TBMs, which range in size from 2.5 feet to 49 feet in diameter.

Terms of the deal were not disclosed.

### Tampa water projects to bring disruptions

For the next year or two, Tampa residents will have their neighborhood streets torn up as the city works on nearly \$100 million in water and wastewater projects.

Mayor Pam Iorio said the six projects are necessary to improve the city's aging infrastructure, and the city will do its best to keep the disruptions to a minimum.

Engineering firm CH2MHill is coordinating the work for the city.

The biggest project involves constructing a 12-mile water pipeline from the David L. Tippin Water Treatment Facility to the Interbay area. The \$55 million project, financed by fees paid by developers, is designed to deliver water to the area.

## GCTA Presents: Sanitary Sewer Challenges In Irving, TX



Todd W. Reck

Todd W. Reck, P.E., chief utilities officer for the city of Irving, TX, presented "Sanitary Sewer Challenges in Irving" at the monthly Gulf Coast Trenchless Association meeting held in April.

With over 18-years experience, Reck is responsible for Irving's Water Utilities which includes planning, engineering, project management, environment compliance, water conservation, training, wastewater collection system, water distribution system, raw water system pumping and administrative services. Irving's Water Utilities includes over 120 staff members.

The city of Irving is situated between Ft. Worth and Dallas, adjacent to the DFW Airport. With a population of more than 203,000, the city's infrastructure has been in need of major repairs. There are more than 700 miles of water distribution and wastewater lines that serve Irving.

Reck discussed the city of Irving's Emergency Sanitary Sewer Projects, in particular the Valley Ranch Interceptor Failure.

"A sewer crew noticed a backup in the interceptor system and tried different cleaning nozzles to penetrate the obstruction in the 24- to 54-diameter concrete and clay pipe," said Reck. "But they soon discovered a large sinkhole and realized the problem was much bigger."

Phase I of the project called for open-cut installation of 600 feet of 42-inch Hobas pipe and three new manholes. Once the sinkhole was discovered, it was determined that a long term approach was necessary, hence Phase II was initiated. The city negotiated a contract with Insituform to install 12- to 54-inch cured-in-place pipe for 12,000 feet. Also, bypass pumping, manhole rehab, and pipe cleaning were required. Total cost of the project was \$4.3 million.

According to Reck, Irving's future wastewater system priorities include:

- Concrete line replacement (54-inch Riverside Rehabilitation)
- CIPP in design phase
- Potential need to line siphons
- 1,200 feet concrete pipe
- Delaware Creek Interceptor Replacement
- Southwest Irving Interceptor Replacement

In addition, sewer interceptor and main replacements, SSES rehab, pump station and water main replacements, and new water reuse and water supply pipelines will be necessary.

For more information about GCTA, contact Ginger Coleman at 713.839.0808, ginger@amchouston.com or visit www.gcta-online.org.

Other projects include replacing water pipes downtown, in the Interbay area, along 22nd Avenue and 19th Street. The 12th Street wastewater force main will also be replaced; it already has erupted at least twice, causing sewage problems in the neighborhood.

Many of the projects will be funded with money from a water rate increase approved in 2007. Bonds have been issued to fund the wastewater project.

### Koch Pipeline lauded for safety

Koch Pipeline Company L.P. received the petroleum industry's top safety award for large pipeline operators at a presentation ceremony in Orlando, FL.

API, an industry association based in Washington, D.C., honored Koch Pipeline for its injury-free performance in 2007 at the API Pipeline Conference.

The API Occupational Safety Award is for the lowest OSHA recordable incident rate for both employers and contractors, and requires an operator to have documented safety requirements and performance criteria to be eligible for the award.

Koch employees have worked 5.3 million hours and since March 2001, with no lost-time injuries and since November 2004, with no recordable injuries. The company's employees in Texas also achieved Voluntary Protection Program Star status – becoming only the fourth pipeline operating group in the U.S. to earn that designation.

Koch Pipeline's overall OSHA recordable rate is 0.00, compared to the industry's 2.20. When it comes to working without an injury resulting in time away from work, the company's rate is also 0.00, compared to the industry's 0.90.

### ASTM focuses on HDPE water quality units

Subcommittee F17.26 on Olefin Based Pipe, part of ASTM International Committee F17 on Plastic Piping Systems, is currently working on a large, comprehensive program to provide the engineering and specifying community with the appropriate tools to design, specify and size high density polyethylene water quality units. All interested parties are welcome to join in the activities of Subcommittee F17.26.

Water quality units are used to remove sediments and some suspended chemicals from storm drainage runoffs. "Removal of contaminants upstream helps to improve the water quality in our natural waterways," says John Kurdziel, director of technical services, Advanced Drainage Systems, and F17 member. "These upstream treatment facilities are increasingly becoming an integral component of the storm drainage system. No manufacturing or structural design standard exists for water quality units composed of corrugated HDPE pipe sections."

Part of the subcommittee's current program is the development of a proposed new standard, WK18469, Specification for Corrugated High Density Polyethylene (HDPE) Water Quality Units. Kurdziel says that the proposed new standard could be used by the many municipalities that already require pretreatment of runoff.

For technical information, contact John Kurdziel, Advanced Drainage Systems, (ph: 614/658-0211; john.kurdziel@ads-pipe.com).

### Precision Pipeline awarded contract

Precision Pipeline LLC has been awarded a contract by Enbridge Energy for 136 miles of 20-inch pipeline in Pembina County, ND, and Kittson, Marshall, Pennington, Red Lake, Polk and Clearwater Counties, MN. Headquarters is Thief River Falls, MN. The approximate starting date is June 16.

### APLC awarded contract

Associated Pipe Line Contractors has been awarded a contract by Texas Gas Transmission Company to install 126 miles of 36-inch pipeline in White, Woodruff, Saint Francis, Lee and Phillips counties, AR; and nine miles in Coahoma County, MS. The approximate start date was May 1.

### Nations' mayors examine importance of municipal water

The U.S. Conference of Mayors convened in New York City in May, at a joint meeting of the Mayors Water Council and the Municipal Waste Management Association, to examine new information on the economic and public health benefits of local government investment in municipal water and sewer infrastructure and services. The mayors assembled a series of panels including environmental, sanitation and water commissioners from several U.S. cities, water experts and bottled water industry leaders.

The meeting was held in response to a municipal water resolution adopted in June of 2007 at The U.S. Conference of Mayors Annual Meeting in Los Angeles. The resolution, titled The Importance of Municipal Water, directed the Conference of Mayors to compile data on the importance of local government investment in municipal water and sewers and to examine how bottled water contributes to solid waste.

A growing number of cities such as San Francisco, Albuquerque, Minneapolis, Seattle, etc., have adopted bans on the purchase of single-serve bottled water by their city departments since 2007, citing concerns about the cost of bottled water and its impact on city budgets, as well as bottled water's contribution to solid waste.

The Cadmus Group Inc., working with the Mayors Water Council, found that investing in drinking water and sewer systems only yields positive returns. Depending on existing local infrastructure, generally a \$1 increase in spending on water and sewer infrastructure

yields a savings of as much as \$2.62. Cadmus' research also shows that adding one job in water and sewer services on the local level can lead to 3.68 jobs in the national economy to support that one water or sewer related job.

Representatives from The American Beverage Association and The International Bottled Water Association attended the session and presented new information on industry efforts to reduce the amount of materials used in plastic water bottles and water conservation in bottled water production processes.

### Tires 'N Tracks wins jury award

Chicago-based Much Shelist has secured a jury trial victory awarding more than \$914,000 plus costs to its client Tires 'N Tracks Inc., a Lombard, IL-based construction firm. Tires 'N Tracks filed suit against the Village of Lisle in June 2003 alleging a breach of contract related to the construction of a relief sanitary sewer.

After beginning work on the sewer, Tires 'N Tracks reported finding differing site conditions that involved heavy layers of underground rocks and boulders that were not revealed in the contract documents. According to Tires 'N Tracks, the Village directed the company to continue work at significant additional expense. After the sewer pipe was completely installed, the Village declined to pay for the additional work and withheld the last interim payment and retainer.

Among other claims, the company asserted that the Village violated the Public Construction Contract Act of Illinois, which requires gov-

ernmental units in Illinois to make an equitable adjustment to the contract price when differing site conditions are properly reported and the governmental unit directs the project to continue.

A jury in the Eighteenth Judicial Circuit Court of Illinois returned a verdict in favor of Tires 'N Tracks on all counts. The jury award of more than \$914,000 includes almost the entire original contract amount, plus a high percentage of the equitable adjustment sought by Tires 'N Tracks and a sizeable interest award.

### In Memoriam

**Jim Durham** died Feb. 22 at Murfreesboro Veterans Hospice Care Facility in Tennessee. Durham was well known in the pipeline industry having received a recognition award from Alyeska Pipeline for service in 1975 and 1976 during construction of the Trans Alaska Pipeline System. He also worked for Gregory & Cook Construction Inc., Gulf Interstate Engineering, Fluor Contractors and Houston Contracting Company. Durham was a member of the American Society of Safety Engineers, Board of Certified Safety Professionals and Veterans of Safety International. Letters of condolence may be sent to his widow, Tina Durham, 1518 Deer Trace, Burns, TN 37029.

**Lewis Richard (Dick) Cline**, 73, passed away on March 28. Cline was a former associate member of the DCA. He is survived by his wife, Terri, five children and five grandchildren. Donations can be made to: Clarehouse, 7324 E. 49th Place No. 3, Tulsa, OK 74114. ■

## Duke's Texas Hold'Em Tournament Raises Dollars For Scholarships



The 5th Annual Charity Pumper Show Invitational Texas Hold'Em Tournament, hosted by Duke's Root Control Inc., was held at the Marriott Hotel in Louisville, KY, Feb. 28. The event helped raise \$500 which was donated to the NASSCO Scholarship Fund.

The winner (second from left) was Oris Kemp from the Texarkana, TX. He was the major chip leader in the TX Hold'Em game with four people left in the game; however he offered to split the pot with the other three players left in the game (pictured in the front row).

Two other games are planned for the National APWA show in New Orleans, Aug. 17-19, and at WEFTEC in Chicago, Oct. 18-22.