

Utility Marking Question

QUESTION

The following question was sent to members of the NACWA Legal Affairs Committee on November 28, 2007:

“We are reaching out to you as a member of the NACWA Legal Affairs Committee with a request for information from a NACWA member utility. The member has posed the following question:

A NACWA member, a regional sewer agency, is seeking to prevent inclusion in proposed legislation which seeks to include the agency in the local utility marking program. To date, the agency has been able to successfully argue that inclusion in the program is unnecessary and overly burdensome since most sewers are at least 20 feet underground and thus don't pose a general threat to the normal excavation project. The member agency is interested in hearing from any agency that is either presently a member of a utility marking program and can provide some information on fees and resources involved in participation or from other sewer agencies that have successfully argued against inclusion in a utility marking program.”

RESPONSES

The following responses were received:

Boston Water and Sewer Commission: The Boston Water and Sewer Commission is not included in Massachusetts' marking program, Dig Safe, even though water mains and service lines are generally not more than five feet from the surface. Those who dig are required to call us directly. The Commission does not charge for marking out its lines.

Chattanooga, TN: Chattanooga has elected not to participate in the Tennessee “one call” utility marking system. The reason for the election to not participate is the cost of marking. As a result of our non-participation in “one-call”, we have had excavators damage sewers for which we cannot collect even though the location of sewers is generally obvious by virtue of nearby manholes. If it is possible for the agency requesting the information to participate in the drafting of the law, they need to keep in mind trying to maintain their rights to collect damages.

Orange County, FL: In Florida, there is a statewide “One Call” system that contractors are required to participate in and individuals that dig or plant trees, etc., are encouraged to utilize, when they work in easements or rights of way where utilities could be located. The contractors or others contact this statewide system and the organization notifies utilities who then locate their utility lines. That said, this system has not stopped contractors from hitting and damaging County utility lines, no matter how accurately they are located on the surface or how deep they are buried.

Metro Wastewater Reclamation District, Denver, CO: Colorado adopted a mandatory underground utility notification program 10+ years ago. At the time of its original adoption, Metro and other municipal water and wastewater facilities were successful in arguing that this was an unfunded mandate for local government, and we negotiated a two-tiered system. Public entities can join as Tier 2 members and pay a one-time fee (although this may change to an annual fee if we can ever negotiate something acceptable with the for-profit utilities and telecommunications companies).

As tier 2 members, all excavators are notified of public utilities with facilities that may be impacted by their projects and required to contact them directly. Utilities have 48 hours after notification to respond and mark facilities. At Metro we set up a dedicated voice mail box to take these calls. We had to add staff to screen the notifications (higher level clerk) and a full-time crew of 2 field operators to mark the facilities.

While the program has had fiscal impacts on Metro, it has also been very effective in protecting our facilities from damage and giving us stronger grounds to go after excavators that fail to notify us and damage our facilities. While our facilities are also typically deep, they are regularly affected by excavations.

Columbus, OH: The City of Columbus is member of OUPS (OH Utilities Protection service). We have an obligation to mark our utilities within 48 hr of a request. Today we have 11 locators. Salary, vehicles and supplies total to about \$600K per year.

Hampton Roads Sanitation District, VA: HRSD is subject to these requirements and while costly they do save us in the long run. In addition the locator activity is also helpful in keeping our records up to date in finding connections and construction changes that were not brought to our attention by our member jurisdictions, which is not all that uncommon given the size of our system and the growth related construction that we have had over the last several years.

The Virginia Underground Utility Damage Prevention Act is the governing document that is enforced by the Virginia State Corporation Commission. Every operator, including counties, cities and towns, but excluding the Department of Transportation, having the right to bury underground utility lines are required to join and follow the rules set forth in the Act. HRSD is a member and fully participates.

HRSD has approximately 500 miles of pipelines of which approx. 50 miles are gravity lines. We mark all of them because first and foremost we want to insure the safety of operators and protect the environment. Secondly, it's required by the Act. The major costs are associated with the Call Center Contract and Staffing. Both of these can vary depending on the amount of development occurring in the utilities service area. There are times when we need to utilize additional technicians to meet the peak marking demands.

Ultimately, the benefits of this program far outweigh the costs. Consider that one emergency repair associated with a damaged line could easily cost \$100,000. The number of instances where marking is actually required are in the 500/month range. These are locations where contractors are excavating on or around our utility. Each instance represents a risk. Our cost breaks down to approx. \$600 per instance to eliminate the risk of operator injury and public health impacts. These dollars better spent in the prevention of damage than the repair.

There is a major secondary benefit that we use to the fullest. As a cross training effort we try to get every technician involved with marking the system. This approach provides us an opportunity to train staff on where our infrastructure exists and requires them to use plans and equipment that they will be able to use in other parts of their job. It's difficult to quantify the training value that we gain from this, but development of our Interceptor Staff heavily relies on their system knowledge and this program is a major tool in that process.

City of Independence, MO: We participate in Missouri "One Call" law. The local power company has taken the lead on getting bids for marking services, but most local utilities participate in the

service. A portion of the cost goes to Missouri One Call and the major portion goes to the marking company. For both Stormwater and Sanitary Sewer, it cost about \$128,000.00 per year.

East Bay Municipal Utility District, CA: EBMUD is required under California law to mark all wastewater force mains. Because the total length of our system is under 40 miles (we own large diameter interceptors but not laterals and smaller sewers, which are owned by our satellite communities), our cost is only \$150 per year for us to join. Our interceptors are more like 12-20 feet deep, and much of the satellite community sewer system is only 5' – 10' deep. We believe the marking is cost-effective in that we would have spent far more over the years recovering money from cities/contractors who would damage our lines had they not been marked.

Orange County Sanitation District, CA: Orange County Sanitation District is responsible for 601 miles of gravity sewers and force mains in a service area of approximately 471 square miles. The current Dig-Alert program consists of a technician that processes the incoming tickets, a dedicated field staff of 2 (who perform other collection system services once their marks are complete), and an engineer (as needed) who assists with complex marks requiring engineering calculations, and who also may order a survey crew if necessary.

Capital costs involve purchase and maintenance of the dedicated Dig-Alert truck (arrow board, storage for traffic control, measuring devices, paint, lights, etc.), and the Dig Smart software, which takes the incoming data and puts it into a more user friendly format and maps it onto the service area location by address and/or Thomas Guide grid.

The technician is a contracted full time person for approximately \$144,000 annually (requires a computer workstation). OCSD's technician assists with a manhole inspection program that uses about 10% of his time. Typically, about 1000 dig alert tickets are received per month, with a cost of \$1.50 per ticket (down from \$1.60 for the last few years). Of those, approximately 950 require review and possibly some research, but no field marking, with an estimated total of about 200 technician and/or field staff hours for research. The approximately 50 tickets per month requiring marking require about 200 manhours per month by field staff, and approximately 15 hours per month of engineering time.

Field staff pay range (hourly rate paid) is approximately \$24-\$34.

Engineering pay rate is approximately \$45-\$55.