ISSUE THREE – LOW-IMPACT UTILITY MARKING PAINT

REQUEST: The City of Dunwoody respectfully requests support for a statewide standard for the nonpermanent marking of utility locations prior to excavation.

JUSTIFICATION: Currently, numerous local governments have adopted a myriad of disparate rules regarding the marking of utilities and the removal of those markings. The series of requirements make compliance for utility companies cumbersome, expensive and difficult.

Additionally, the hodgepodge of regulations and the absence of statewide legislation often leave streets and sidewalks riddled with "industrial graffiti" long beyond the completion of the utility work.

Modern technology provides for chalk-based paint and other nonpermanent marking options that avoid the necessity for utilities to return to the project for the removal of the paint. Florida adopted universal language for its utility locators to use "flags or stakes or temporary, nonpermanent paint or other industry-accepted low-impact marking practices."

ATTACHMENT: (A) Language from Florida Statute 556.114 requiring the use of nonpermanent paint or other low-impact marking practices and (B) recent article discussing the advantages of low-impact utility marking.

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556.114 Low-impact marking practices.—

(1) An excavator providing notice under s. 556.105(1)(a) shall identify in its notic that will be excavated during the period that the information in such notice is conside s. 556.105(1)(c).

(2) When an excavator has not completed an excavation noticed under s. 556.105 the period that the information in the notice is considered valid under s. 556.105(1)(c excavator must provide a subsequent notice to the system under s. 556.105(1)(a) to c the excavation, and such subsequent notice shall identify only the remaining area to b

(3) When an excavation site cannot be described in information provided under s. with sufficient particularity to enable the member operator to ascertain the excavatio the excavator and member operator have not mutually agreed otherwise, the excavat the proposed area of the excavation before a member operator is required to identify route of its underground facilities in the proximity of any excavation. However, prem required when the premarking could reasonably interfere with traffic or pedestrian co

(4) A member operator shall identify the horizontal route of its underground facili in s. 556.105(5)(a) and (b), and excavators shall premark an excavation site as set fo subsection (3) using flags or stakes or temporary, nonpermanent paint or other indust low-impact marking practices.

(5) Any horizontal route-identification marker must be in a color identified in the Code for Utilities.

(6) Sunshine State One-Call of Florida, Inc., shall establish an educational program purpose of informing excavators and member operators about low-impact marking pra

History.—s. 8, ch. 2010-100.

Innovations in Locating: Low Impact Marking Challenges

By Arthur Coello, Co-Founder and CEO, EZ Paint®

For years, contractors, utility companies, cable companies – anyone using marking paints – have been faced with two major problems: durability and toxicity. We know using locating marks ***(Life Safety Marks)*** is important and equally important for the marks to last for the appropriate amount of time. Costly damage, and in some cases loss of life, can occur when Life Safety Marks are not used. However, once projects are completed, these marks are often viewed as industrial graffiti by a growing number of communities.

Industrial Graffiti: Not just an eye sore… a costly problem, too

"Industrial graffiti" caused by locating marks made by traditional paints has created an ever-expanding problem on our streets, sidewalks, driveways and patios. Communities across the nation are looking for ways to address the issue.

The demand for marking paint removal after job completion continues to rise. This is a costly undertaking – research by Florida's **Sunshine State One Call** found that on average it *costs 3 times as much to remove marking paint than it does to apply it*. Conventional marking paint lasts anywhere from 6 months to more than 3 years if not removed. Now companies have begun looking for a solution to address these issues.

As a custom home builder, I saw firsthand the problems with traditional marking paints. Frequently I received complaints from property owners about markings that just wouldn't go away. Not only was it very expensive, the time spent to return to the job site, and remove them was creating logistical issues for other jobs in progress.

I was certainly not alone in realizing the problem at hand. Over the past several years, states across the country have been exploring ways to reduce and regulate industrial graffiti. In addition, some of the biggest consumers of marking paint for locating, such as utility providers, are experiencing the problem firsthand and have started looking for solutions. First and foremost, they want to satisfy customers who complain about lasting marks. They are also witnessing increased pressure from towns, cities and states to rectify the dilemma. The challenge is striking a balance. Locating marks are a must for any excavation project; the safety and effectiveness for each project relies heavily on having markings intact for the life of the job. But then they need to go away.

Exploring solutions to Industrial Graffiti

The need to resolve the industrial graffiti dilemma has spawned some very productive trial and error approaches to solving the problem. Initially, discussions revolved around having the contractors remove the paint once it was no longer needed. But it quickly became evident this was too costly in both time and money. Some other potential solutions that have been tested include chalk-based paints, biodegradable flags and tape.

Chalk-based paints solve the problem of having the marks disappear – but it has a tendency to not last long enough for certain projects, especially when exposed to inclement weather. Sunshine State One Call has documented jobs experiencing heavy precipitation that caused locators to remark 6 times or more over the life of the project ticket.

Biodegradable flags work on ground but not paved surfaces. But they can be easily moved out of position during the project, causing a potentially hazardous situation. *Color tape* is another potential solution, but precipitation can cause the tape to lose the necessary adhesiveness. And, like flags, tape can be relocated causing a potentially dangerous condition.

Temporary, low impact marking

I believe the most promising solution to industrial graffiti is a ***temporary, low impact marking paint*** that is biodegradable, environmentally friendly, and non-toxic. It solves the problem,

1 DAY

15 DAYS

30 DAYS

45 DAYS

60 DAYS

90 DAYS

and at the same time offers a safer product for the environment and the people working with the paint. The biggest challenge is finding a balance between the two primary objectives. Having an environmentally friendly paint that remains visible long enough to get the job done in colors and hues that meet ***American Public Works Association (APWA)*** standards. But then it must biodegrade and evaporate. Ideally, within 30–90 days, not leaving unsightly markings for years after the completion of the job.

Temporary paint should also provide a safe alternative for users; not containing harmful products that are identified on the California ***"Proposition 65"*** Law's list of restricted products. Prop 65 is designed to control the release of toxic chemicals into the environment or to limit acceptable amounts thereby promoting clean drinking water and keeping toxic substances out of consumer products. Research by the State of California reveals serious concerns about the long term health effects from exposure to these chemicals – including cancer, birth defects and other reproductive complications.

Here are two examples of companies currently testing low impact marking paints.

Teco Energy, Tampa, Florida

In light of potential legislation that will require removal of locating marks, Teco Energy began searching for an easier and more cost effective way to accommodate customer requests for marking paint removal. "We tested low impact paint in red because it's traditionally the toughest color to remove. Removal was easy to do with a power washer; with little or no effort the paint just washes off. Traditional marking paints are much harder to remove - we needed to use an acid wash," states **Lorenzo Jones**, a *Teco Contract Administrator for Underground Damage Prevention*. "Another benefit – it only required one application to get sufficient coverage, so it takes a lot less paint to get the job done."

NSTAR, Westwood, Massachusetts

NSTAR conducted its own test on red paint. The test took place in high traffic areas to evaluate durability and how well it would fade away over time. *NSTAR Senior Supervisor of Electric Operations* **Mike Sweeney** states, "We are happy with the color matches and it works well on bricks where other products didn't go away. We previously spent significant money removing locating marks. That was a main driver for using low impact marking paint."

Conclusion: Time for a change

Mounting pressure from customers, industry and the public sector has made it clear: It's time to put an end to industrial graffiti while providing an environmentally friendly, safer marking paint for our planet and the people in the locating business.

DISCOVER MORE!

About the Author

ARTHUR COELLO is the co-founder and CEO of ***EZ Paint***. Based in Medley, Florida, EZ Paint manufactures a low impact marking paint based on specifications outlined in this article.

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EZ Paint is an active promoter of the ***811 Call Before You Dig*** campaign.