

## Dig Safe-ly

When digging to plant yucca cacti, I heard that dreaded "thunk" that means you've hit a pipe. I was on my own property, and thought I knew where all the underground utilities were. As it was grey Schedule 40 electrical conduit, I shut off the main power to my house before proceeding.



Fortunately this was just empty conduit from when the house is built; for some unknown future plans that never materialized.

However many times people dig without checking first, or proceed without caution, and are injured or killed.

It's hard to find good injury statistics: sometimes it's not the person digging, but a neighbor or firefighter hurt. In the US in 2015 - on average - someone hit an underground wire, cable or pipeline about **once every 1.5 seconds**, according to Common Ground Alliance DIRT (Damage Information Reporting Tool) report.

**Dig Safe** (among others) is a company that will provide a review before you break the soil. In the US, calling **8-1-1** will also get you help. There is [www.clickbeforeyoudig.com](http://www.clickbeforeyoudig.com) in Canada; in the UK call **0800 688 588**. For the EU and the rest of the world, one option is [www.idscorporation.com](http://www.idscorporation.com).

Be sure for any excavation 1) check ahead for buried utilities, and 2) your folks know what to do if they encounter the unforeseen.

## General Duty Clauses (!)

The General Duty Clause of US OSHA says: *Each employer shall furnish to each of his employees employment and a **place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.*** [emphasis added]

The General Duty Clause is often used where there is a safety issue with no corresponding regulation. A good example is historic ergonomic citations - people were injured, but no regulation was violated.

So OSHA said, to paraphrase, these ergonomic injuries were a "*recognized hazard*" and those employers were not furnishing a place of employment "*free from*" these risks.

The EPA's Clean Air Act sec. 112(r)(1), **also** has a General Duty Clause, added in 1990. It applies where extremely hazardous substances are present: "*The owners and operators... have a general duty [in the same manner and to the same extent as the general duty clause in OSHA] to identify hazards which may result from releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.*"

This has been interpreted that - for example - a facility has Fluorine gas, and they store below the EPA threshold. However, the business knows things like there have been "near miss" issues with releases; or there's a "sensitive receptor" very close by, such as a hospital or daycare.

In these scenarios, a company must implement the appropriate elements of an EPA Release Management Plan.

## App Corner - Detector Tubes

Chemical detector tubes are a quick, reliable and fairly accurate way to get "grab samples" of many air contaminants. These use a hand- or battery-powered pump to draw air through glass tubes, filled with specific chemicals that change color in proportion to the air concentration.

Instead of carrying a book around, **Dräger** and **NEXTTEQ** have free reference apps.