



The Real Dirt on Pipeline Strikes

What happens when you hit an underground fuel pipeline? Well, a number of things – the most immediate being a release of gas under pressure and, with the right spark, a catastrophic explosion. Follow that up with the death of a worker, possible property damage, and a bevy of hair-raising lawsuits – and you've got one massive nightmare on your hands.

So the next question is – why do they occur? Well, a number of reasons – the most common being a twist of thrift. Here's a typical excuse...

Why should I be paying my guys to stand around, waiting for some locate company to show up? Time is money!

Really? Consider this...

If you strike a pipe, alongside the most obvious safety risks to workers and the public-at-large, you'll be facing a host of costly prosecutions – from the Technical Standards and Safety Authority (TSSA) and the Ministry of Labour (MOL) for starters – which could run you as high as \$50,000 (for an individual), \$1,000,000 (for a corporation) and imprisonment for a year from TSSA – let alone what other authorities throw at you.

While that certainly gives most pause for thought, as the majority of contractors are compliant with fuels safety regulations, there were over 2,500 pipeline strikes in Ontario over a sixteen month period, spanning January 2008 to April 2009. Couple that with two fatalities and two injuries – Niagara Falls in the summer of 2008 and Georgian Bluffs a few months later – and you've got some serious stats to contend with.

TSSA recently prosecuted two companies, Reid's Heritage Homes Ltd. in Guelph (February 2010) and Elgin Construction in Kitchener (February 2008), for damaging a service tee on a six-inch gas pipeline, causing the release of natural gas, prompting an immediate evacuation. While both areas were quickly made safe, the two companies were fined \$20,000 (respectively) for failing to comply with Ontario Regulation 210/01.

If you excavate, or contract with a building owner to excavate or perform ground disturbances, you are obliged to abide by fuels safety regulations. First, look for any potential source of fuel usage on the property prior to disturbing the soil.

Any activity that disturbs the soil, such as digging, driving bars in the ground, installing underground systems, etc., could damage a pipeline. Their depth may change over time due to erosion or changes in the landscape, so do not take *any* chances even if your activity is relatively shallow.

If you see any indication of fuel use in the vicinity, ascertain the fuel type and source. If the fuel source is not apparent (such as a cylinder at the appliance), investigate further prior to excavation. You could be over a fuel pipe and hitting one is disastrous. Hire the services of a private locate company if unsure.

If a leak occurs, even through what may seem to be a minor scrape of a pipe from a shovel or backhoe, it can spread long distances and ignite, if near a flame or spark, causing a fire or deadly explosion. Underground fuel supply lines are designed to keep the gas or fuel oil safely inside. In order to stay that way, there are rules for digging.

Contact your local utility for the location of all nearby pipelines. A simple call will quickly and easily get your underground utility lines marked. Check the paperwork left by the locator to ensure it covers your dig area, and make sure you understand all the markings. If not, discuss it with the locator.

Unknown to the utility, there may also be underground residential supply lines installed by a contractor at the request or under contract with the homeowner.



As per TSSA's gaseous fuels regulations, all underground piping must be locatable. While a homeowner should be asked for locations, they may not have accurate and complete information. If unsure of any underground line, contact a private locator (under 'Cable Detection, Installation and Splicing' in the Yellow Pages or Google 'Private Locates' in your area).

As a final note, any excavation activity will require a 'valid locate'. What's valid? Paint markings, stakes or flags in the ground where excavation will take place and appropriate paper work indicating the limits of a locate or the digging boundary (found on a locate sheet).

Markers only indicate the presence of a pipeline. They should not be used or relied upon to determine the exact location of a pipeline. With that in mind, you must carefully hand dig within three feet (or one metre) of those markings as required by law under TSSA's Guidelines for Excavations.

Even if you happen to cause what seems to be only minor damage to a buried utility pipeline, notify the utility company immediately. A gouge, scrape, dent or crease to the pipe or coating may cause a future break or leak, so don't cover it up. Do not attempt to squeeze off the break or control the flow of gas – you could cause an explosion. Applying pressure to the pipe could potentially cause a static spark, ignite the gas and create a catastrophic explosion.

It is imperative that the utility company, and only those qualified to do so, inspect and repair any damage to the line – for everyone's safety. If you become aware of such an incident or potential incident, please contact your local utility immediately.

TSSA, the Ontario Regional Common Ground Alliance (ORCGA), Ontario One-Call, and various industry stakeholders are collectively tackling the issue, but there is still a way to go yet. With your help we'll keep the gas flowing, safely in the pipe, underground where it belongs. You dig?

If you have any questions about this or other fuel safety issues, feel free to contact TSSA toll-free at **1-877-682-8772**. Access important information, such as 'TSSA's Guidelines for Excavations' and 'How to Read a Locate Sheet', at www.tssa.org and www.safetyinfo.ca. Please post the attached 'Call Before You Dig' sign in your area as an important reminder of underground utility locates.

April is **Dig Safe Month**, honoured by all Common Ground Alliance members across North America, to spread awareness of safe excavation practices, and remind contractors to call before you dig. Visit ORCGA's www.digsafe.ca for **Dig Safe Month** events across Ontario.

About TSSA

TSSA is an innovative, self-funded, non-government organization focused on delivering public safety services. It provides not-for-profit regulatory safety services in industry sectors such as fuels, amusement devices, elevating devices, boilers and pressure vessels, operating engineers, and upholstered and stuffed articles. The organization's vision is to be the world leader in public safety services.

For more information, please contact:

Gregory Kerr, Public Relations and Communications
Technical Standards and Safety Authority
Telephone: 1-877-682-8772; Email: media@tssa.org

For more information on the Technical Standards and Safety Authority, please visit www.tssa.org.



CALL BEFORE YOU DIG

To arrange for free natural gas pipe location service at your site,
call Ontario One-Call five working days in advance.

1-800-400-2255

www.tssa.org
www.orcga.com