



# gas pipeline safety guide



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# working safely

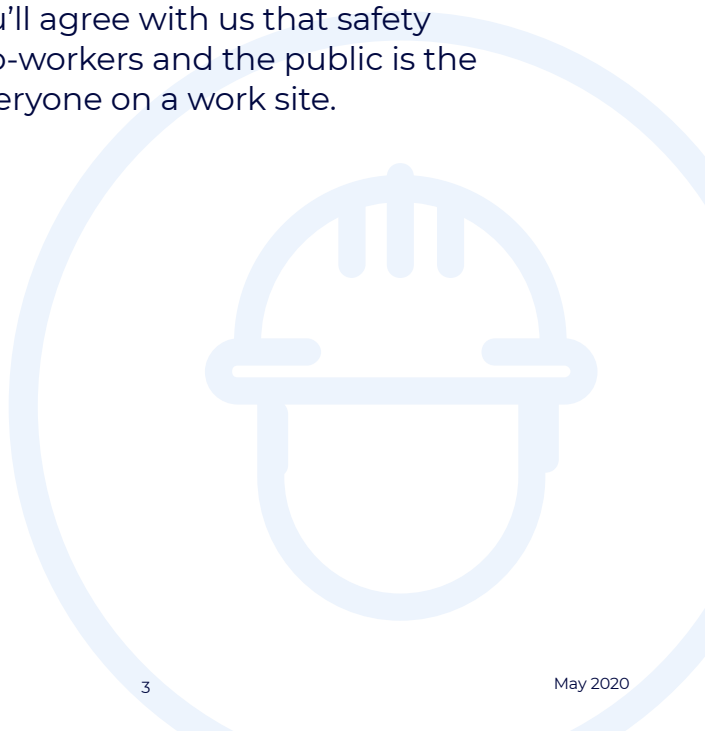
Vector is leading the transformation of the energy sector to create a new energy future.

We are New Zealand's largest distributor of electricity and gas, owning and operating networks that span the Auckland region. We are focused on meeting the energy needs of more than 680,000 customers across the country.

With a strong record of health, safety and environmental leadership, our aim is to keep all contractors, customers and the public safe around our network.

We encourage you to read this document first to ensure you keep yourself and others safe before you dig on private or public property.

We're sure that you'll agree with us that safety for yourself, your co-workers and the public is the responsibility of everyone on a work site.



## your legal requirements

This Vector Safety Guideline is a simple summary document and is not intended to provide full guidance or be relied on by anyone as a complete set of requirements.

The WorkSafe 'Excavation Safety' Guideline lists minimum safe work practices for carrying out any work near all underground gas pipes and any other utility services.

Under the Health & Safety at Work Act 2015, all hazards or underground services must be located and confirmed, by following industry recognised techniques including hand digging and hydrovacating, before any excavation can be carried out with machinery.

Other safe working practices and other relevant legal requirements can be found in the Gas Act 1992 and its related regulations.

If anyone breaches any of the above laws and regulations we may refer the matter to WorkSafe for investigation, particularly for repeat offenders. A person conducting a business or undertaking (PCBU) has a duty to report notifiable events to WorkSafe.

We may also take legal action to recover both the cost of repairs and the cost of lost business from any party responsible for damaging our network.

# safety when digging

Whenever you are digging on private or public property near natural gas pipelines, there is a serious risk to life and property if these pipes are damaged.

External interference is the leading cause of gas pipeline incidents, especially from the use of excavation and directional drilling equipment.

This document is a general guide to safe working practices when working near our gas pipelines and provides information about the services we offer to help you.

## Vector's services to help you work safely

We provide a number of services to help people work safely around our gas pipelines:

- Plans that indicate the approximate location of our distribution pipelines.
- Close Approach Consents which are required for all works within two metres of strategic gas distribution pipelines.
- Pipeline safety awareness seminars (on request).
- Gas disconnections.

Before you start any work, contact us on **0508 B4U WORK** (0508 248 967) or go to **[www.beforeudig.co.nz](http://www.beforeudig.co.nz)** to order plans.



## planning your work

Please allow enough time to plan your work. As a rule of thumb you should allow:

- Two working days for plans.
- Two working days for a Close Approach Consent.
- Up to 20 days for disconnections.

## the dangers

If you hit a gas pipeline there is a risk of:

- Gas igniting, causing serious harm to life and property.
- Gas accumulating in adjacent buildings with the potential to explode.
- The force of escaping gas from a high pressure pipeline can also cause serious personal injury.

Please note that any electronic equipment in the vicinity, including mobile phones, could cause escaping gas to ignite.

## safety while digging

Before you begin any digging work you should find out where Vector's electricity, gas and communications cables and pipes are located. The presence of overhead lines in the area does not automatically mean an absence of underground cables.

Please note that our cables and pipes are laid at different depths in the ground, and may vary from just under the surface to well over 2m deep. Customer service pipes are generally between 0.3m and 1m deep.

We cannot guarantee the depth of any cable or pipe because alterations to the ground cover may reduce or increase the depths over time. Some gas pipes are laid by directional drill so there will be no warning tape or trench lines, however tracer wire is often laid with gas pipes that can be used to track gas pipes.

Please do not use toothed excavator buckets when digging close to underground assets.

### step 1: obtain plans

Visit [www.beforeudig.co.nz](http://www.beforeudig.co.nz) to request plans at least two working days before you begin work. We'll then email you the free plans that indicate the approximate location of underground cables and pipes.

Please note that these plans are valid for 28 days from the date of issue; new plans have to be requested after 28 days.

The accuracy of our plans cannot always be guaranteed as road re-alignment, alterations to ground cover and property boundaries can all affect accuracy. This means that you will have to confirm the location of our cables and pipes within your work site before you begin any work.

### step 2: mark out the locations

Use the plans obtained as a guide for locating and marking out all cables and pipes within your worksite.



Please note your responsibilities under the Health and Safety at Work Act 2015, whereby you must visually confirm the location of underground services before commencing excavation.

### step 3: potholing to expose cables and pipes

Pothole with great care by hand digging or hydrovacating to avoid damaging any pipes. If you discover warning tape or a protective covering you must continue hand digging until you have exposed the pipe shown on the drawings. Its very important that you physically see the pipe indicated on the plan.



### continue working safely

- Always assume that pipes are live until confirmed otherwise by a Vector representative.
- If you need to move a gas pipe and expose any more than 2m in length that is unsupported, you must contact Vector for assistance. Only qualified Vector staff can physically handle and relocate gas pipes.
- Use only white sand or an approved clean soil with no rock or concrete to backfill around gas pipes.
- Don't forget to put any protective covering or warning tape back when reinstating.
- Be aware of services to individual properties that branch off mains pipes in the street.



## close approach consents

For safety reasons, **Close Approach Consents are required for all works within two metres of strategic pipes.**

We will contact you if any strategic assets are shown on the plans you have requested and arrange for a Close Approach Consent to be issued if needed. We will also provide on-site advice if required.

You must not use any mechanical excavator within one metre of strategic pipes - you must hand dig. Exceptions to this are only permitted if the excavation technique is expressly provided for in the Close Approach Consent.

## safe digging summary

Key points to ensure safe digging:

1. Obtain plans from us before you start work.  
Please call 0508 B4U DIG (0508 248 344) or go to **[www.beforeudig.co.nz](http://www.beforeudig.co.nz)**
2. If our plans show electricity, gas or communications cables or pipes you must locate them before you start work.
3. Carefully pothole using WorkSafe approved techniques to expose cables and pipes.
4. Help us keep pipelines safe by reporting any exposed or damaged pipelines. Some networks have thin plastic coatings over steel pipelines that are easily damaged. It is critical that even minor damages are reported as these can lead to leaks through corrosion over time.

5. Watch out for gas services for customers coming off gas mains.
6. Follow the WorkSafe Excavation Safety Guideline.
7. Recommended backfilling material must be used.
8. You will be advised if you need a Close Approach Consent.

## removal or demolition of a building

For your own safety, you must have the gas service permanently disconnected from Vector's gas network in the street and have the meter removed before you demolish or remove a building.

For gas disconnection requests please contact your gas retailer. If you don't know who your gas retailer is, please call us on **0508 Vector** (0508 832 867) and allow 20 working days to process this request. Charges may apply for this service.



# what to do in an emergency

If you hit a gas pipeline, or smell or hear gas escaping:

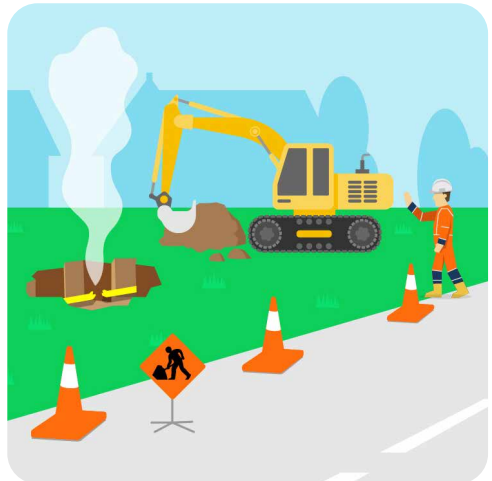
- Switch off all machinery and remove all sources of ignition, including mobile phones and cameras.
- Evacuate the area and stay at least 50m away.
- Call the fire service on 111 then call us on **0800 764 764**.
- Leave the damaged pipe to vent, keeping it open and free from any materials or equipment.
- Do not re-enter the leak area to switch off or move any machinery once evacuated.
- Leave any ignited gas fires to burn, do not try extinguishing ignited gas fires.
- Do not try squeezing off the gas pipe.

# report all damage to pipelines

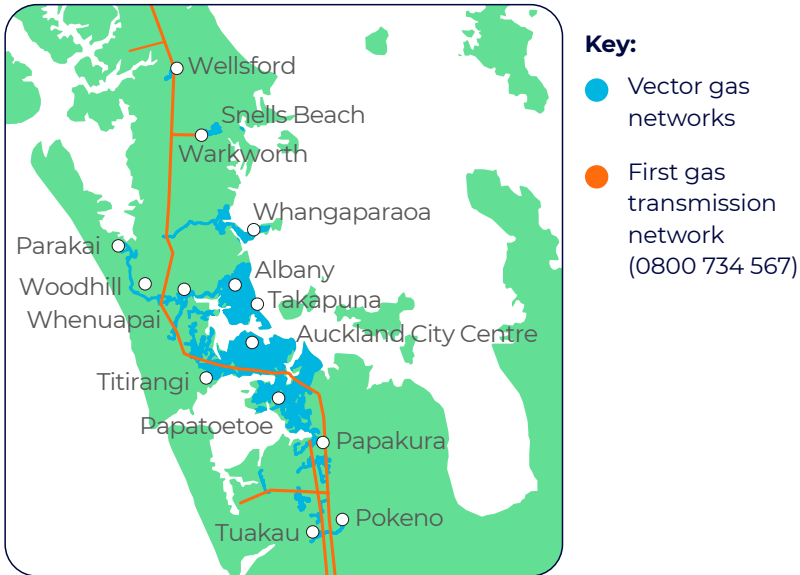
Help us keep pipelines safe by reporting any exposed or damaged pipelines on **0800 764 764**.

Some networks have thin plastic coatings over steel pipelines that are easily damaged. It is critical that even minor damages are reported as these can lead to leaks through corrosion over time.

All repairs to damaged gas pipelines can only be carried out by qualified Vector personnel.



# our gas network coverage



## quick reference numbers

For gas pipeline plans call  
**0508 248 967** or visit  
**[www.beforeudig.co.nz](http://www.beforeudig.co.nz)**



**before** **udig**  
**.co.nz**

Close Approach Consent and safety advice **0508 248 967**

Emergencies call **111** then call Vector on **0800 764 764**

Disconnections **0800 447 447**

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