

# Installation Faults: Good Practice Guide for Gasfitters

## Overview

This document provides good practice guidance for gasfitters who are carrying out gasfitting work. It is intended to provide guidance to gasfitters to help them decide what to do when they believe on reasonable grounds that a gas installation or gas appliance presents immediate danger to life or property or is otherwise at risk. This document is not intended as a substitute for the Gas Regulations nor is this document a substitute for a full understanding of a gasfitter's obligation under the Gas Regulations.

This document provides procedures and guidance for gasfitters to apply when they discover faults in existing gas installations during the course of gasfitting work.

The Gas Regulations in regulation 27 state:

### **27 Notification to Secretary**

*Any person entitled to carry out gasfitting who is carrying out any gasfitting work and who believes on reasonable grounds that a gas installation or gas appliance presents immediate danger to life or property shall, as soon as practicable, advise the owner or occupier of the property where the danger exists, and the Secretary.*

In short when a gasfitter discovers a situation that is **immediately** dangerous they must first notify the owner or occupier as soon as practicable and then the Secretary, (which for these purposes, is the Energy Safety Service (ESS)).

“Immediate danger” is not defined in regulation but there is a distinction between the risk of future danger and **immediate, existing danger**. That is, where the actual danger to life or property, if not averted, would result in harm to people or property in the immediate future. For gas installations, immediate danger should be interpreted as where the agent of harm is already present. Examples would include a leak of unburnt gas (risk of fire or explosion) or the presence of products of combustion (risk of carbon monoxide poisoning).

In such situations, the gasfitter should immediately inform the owner or occupier and it is recommended that the gasfitter seek permission to make the scene safe. They should only then contact the ESS. It is important to note that the ESS is not an emergency service.

There will be other times where a fault is discovered that presents no immediate danger to life or property. In such situations there is no legal obligation to inform either the owner or occupier or the ESS. In such cases it is recommended that the owner and occupier should be informed of the fault. The ESS should only be contacted if the fault is believed to be indicative of a generic fault that may affect the industry more widely.

## Procedures:

These procedures are only a recommendation. The only legal requirement is to advise the owner or occupier and the ESS of immediate danger to life or property.

### Situations of Immediate Danger

An appliance or installation creating an Immediate Danger is one, which if operated or left connected to a gas supply, is an immediate danger to life or property. Broadly, these will be installations that fail tightness tests, appliances that fail spillage tests or appliances which have serious flueing and/or ventilation or combustion deficiencies when measured against the appliance manufacturer's instructions, NZ Standards or other relevant standards or guidance documents.

#### Typical examples (not exhaustive)

Pipework: Outside tolerance of soundness test or within test but detectable smell of gas
Pipework: Pipework inappropriate (e.g. garden hose)
Appliances: Spillage of products of combustion or signs of occurrence with no evidence problem has been corrected
Appliances: Which should be flued but are not
Appliances: Not suitable for gas supplied
Appliances: Safety controls inoperative
Flues: Spillage of products of combustion or signs of occurrence with no evidence problem has been corrected
Flues: Terminating into internal space
Ventilation: Permanent ventilation has been closed off

Faults (such as leaks) at or upstream of the gas meter should be reported to the gas supplier.

Where possible, and with the owner or occupier's agreement, every endeavour must be made to make the appliance or installation safe at the time of the visit either by correcting the underlying fault or by other means such as isolating the whole or part of the installation affected.

If the fault is corrected immediately, the Gas Installation Fault Notice should be completed and sent to the ESS.

If the fault is not corrected immediately, the following actions should then be taken:

- a) Explain to the owner or occupier that the appliance or installation is, in your opinion, immediately dangerous, and should be disconnected from the gas supply until the situation is rectified and that further use would contravene the Gas Regulations, and
- b) With the permission of the owner or occupier
  - i) Immediately turn off and/or disconnect and seal the gas supply to the appliance or installation with an appropriate fitting so that the faulty appliance or installation cannot be used,

- ii) Attach a suitably worded DO NOT USE warning label<sup>1</sup> to the appliance or installation in a prominent position, then
  - iii) Complete the Gas Installation Fault Notice<sup>2</sup> and give a copy to the owner or occupier and keep a copy for your file.
  - iv) Send a copy of the Gas Installation Fault Notice to the ESS (contact details are on the form) as soon as practicable.
- c) If the owner or occupier withholds permission, the Gas Installation Fault Notice should be sent to the ESS immediately and a copy provided to the owner or occupier.

Receipt of the notification will be acknowledged by ESS

## Situations that may be at risk

An At Risk appliance or installation is one that does not comply with current regulations, standards and codes and may in the future constitute a danger to life or property. This includes installations that are inadequately maintained or where the current surroundings have changed

### Typical examples (not exhaustive)

Pipework: Showing signs of corrosion or damage likely to affect safety
Pipework: Significantly undersized, preventing the appliance operating at the manufacturer's intended minimum gas input rating or affecting the safe operation of any appliance
Appliances: Open-flued appliance installed in a compartment requiring purpose provided high and low-level permanent air supply; providing inadequate ventilation
Appliances: Flueless or non-room-sealed appliance in bathroom or shower room <sup>3</sup>
Appliances: Appliances installed in a room or rooms which has later been converted into bedrooms, where the appliances do not comply with the current requirements for gas appliances in bedrooms
Appliances: Evidence of damage to adjacent combustible materials
Appliances: Furnishings located too close to appliance

Faults (such as service valve "let-by") at or upstream of the gas meter should be reported to the gas supplier.

The gasfitter must advise the owner or occupier of the risks and make a recommendation on the necessary remedial action to be taken. With the owner or occupier's agreement, endeavour to rectify the situation(s) and make the appliance or installation safe for continued use at the time of the visit

If this is not possible, the following actions should then be taken:

- a) Explain to the owner or occupier that the appliance or installation is, in your opinion, At Risk, and that it should not be used without taking some form of

<sup>1</sup> See Appendix B

<sup>2</sup> See Appendix A

<sup>3</sup> These cases should be reported to ESS. Special care must be made to determine whether there are any **existing** combustion hazards and **when** the appliance was installed.

alleviating action. Continued use would be at the owner or occupiers own risk and may contravene the Gas Regulations

b) If there is no way of alleviating the risk, then with the permission of the owner or occupier,

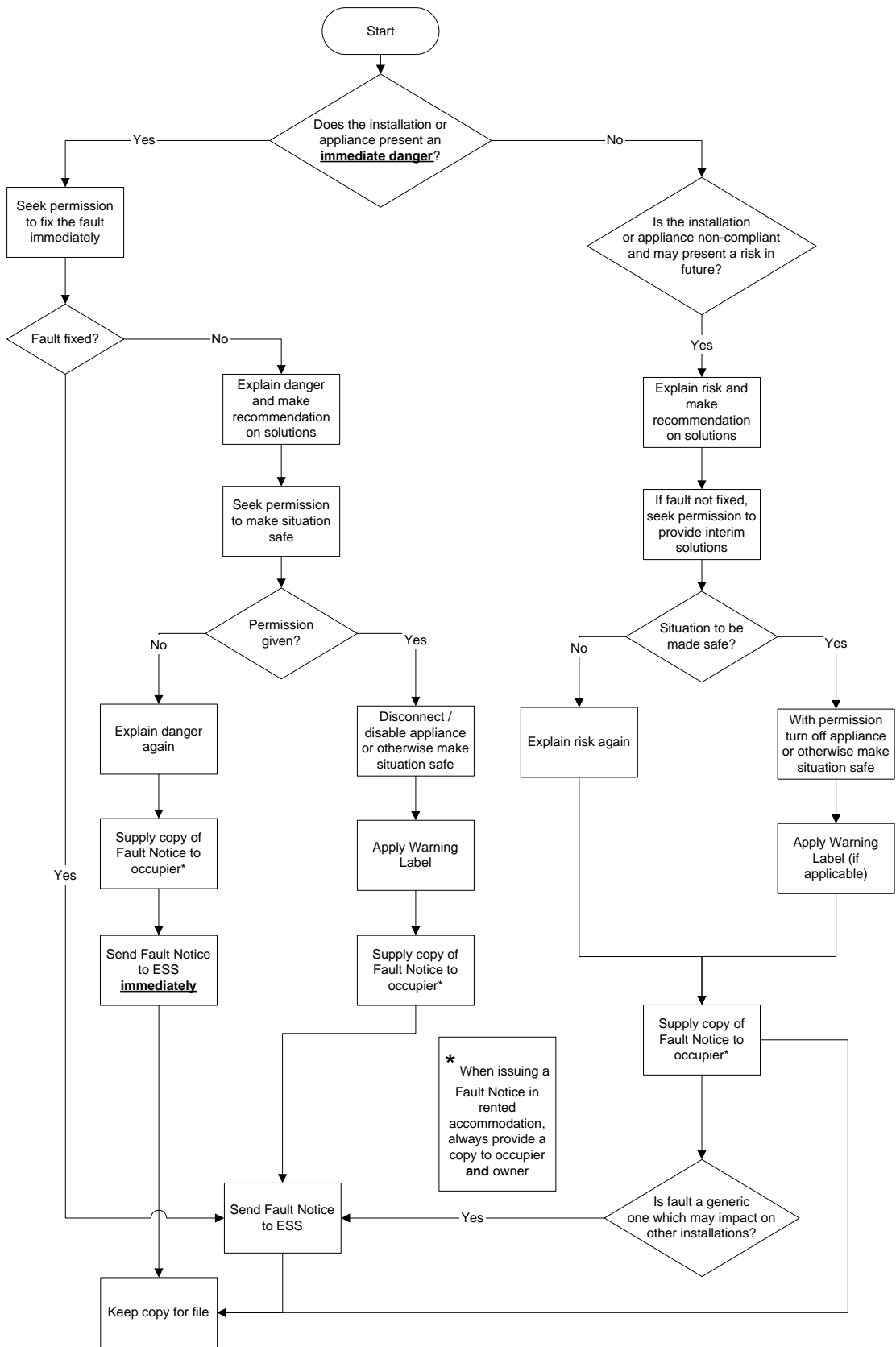
i) Immediately turn off the appliance or installation.

ii) Attach a suitably worded DO NOT USE warning label to the appliance or installation in a prominent position.

c) If permission to turn off is refused, the owner or occupier's attention should again be drawn to the fact that it may be an offence to continue to use a gas appliance or installation once informed that it has a potential to be dangerous.

d) Complete the Gas Installation Fault Notice and give a copy to the owner or occupier and keep a copy for your file.

e) Only send a copy of the Gas Installation Fault Notice to the ESS if it felt that the fault is indicative of a generic fault. Further and supporting information should be provided. Receipt of the notification will be acknowledged by ESS





## Appendix B

Examples of generic warning tags available from safety equipment suppliers



Figure 1 Handitags Ltd tag



Figure 2 Segno Industries Ltd tag



Figure 3 NZ Safety Ltd tag