# Gas Regulations (Mini Heater Adaptor Fitting) Notice 2020

Pursuant to Regulation 63 of the Gas (Safety and Measurement) Regulations 2010 (“Regulations”), I, Mark Stephen Wogan, Manager, Energy Safety – High Hazards, Energy and Public Safety, WorkSafe New Zealand (“WorkSafe”), give the following notice.

**Notice**

**1. Short Title and Commencement**

a. This notice is the Gas Regulations (Mini Heater adaptor fitting) Notice 2020.
b. The prohibitions contained in this notice take effect on 7 August 2020.

**2. Prohibited Equipment**

a. The manufacture, importation, sale (including supply), offer of sale, and use (including installation), of the following gas fitting as described in this notice, is prohibited: Mini Heater adaptor fitting, as described in clause 3 (the prohibited adaptor).

**3. Description**

The prohibited adaptor is further described as follows:

a. An example of the prohibited adaptor has been sold by Trade Me user “kvb” on numerous occasions.
b. The images below show views of an example of the adaptor and the adaptor in use.
c. The prohibited adaptor consists of two concentric stainless steel cylinders with a black enamelled steel cap. The cap may sometimes have the word “hot”.
d. The inner cylinder has multiple small holes cut in in rings around the circumference and the outer cylinder has larger slots in rings around the circumference.
e. The bottom of the external cylinder has slots cut in it to allow the adaptor to be clipped to the trivet of the burner of a gas cooker.
f. The adaptor may be supplied with a wire tool for lifting the hot adaptor.

Figure 1 Adaptor with lifting handle

Figure 2 Underside of adaptor

Figure 3 Example of adaptor in use

Figure 4 Example of adaptor in use

**4. Reasons for Prohibition**

a. The prohibited adaptor is, or may be, gas unsafe, in that there is significant risk that a person may suffer serious harm as a result of dangers arising from carbon monoxide poisoning or serious burns.

b. The adaptor turns a gas cooker into a gas heater. All gas appliances supplied in NZ must meet certification standards cited in the regulations. These certification standards require that the combustion products generated by a heater must be of a higher (cleaner) quality than that for a cooker. For instance, ***AS 2658: LP Gas—Portable and mobile: 2008*** requires that the ratio between the amount of carbon monoxide and carbon dioxide produced is less than 0.01 for a cooker but less than 0.007 for a gas heater.

c. The prohibited adaptor is being supplied for use on any gas cooker but even if the combustion was perfect in the cooker adaptor configuration it is unlikely it would meet the acceptance criteria set in the Regulations.

d. Figures 3 and 4 show how the adaptor would be used in conjunction with a cooker. In both of these images the adaptor is not fixed to the cooker's trivet. Instead, the adaptor sits on the burner and inside the flame. This introduces a significant risk of a phenomenon known as flame impingement or quenching.

e. In normal combustion the hydrocarbon fuel is burned producing carbon dioxide and water. If the flame process is compromised by the cooling effect of a metal object being placed in the flame, excessive amounts of carbon monoxide will be produced. By way of example, in 1997 three youths died in their car from carbon monoxide poisoning at Arthurs Pass. They were cooking using a camping cooker that lacked trivets. The resulting flame impingement was found to be producing levels of 9000 ppm carbon monoxide versus 97 ppm with the trivet fitted.

f. The other hazard is that as the prohibited adaptor is not fixed to the cooker there is a significant risk that the red hot adaptor may be toppled, producing a burn and/or fire risk.

Dated at Wellington this 6th day of August 2020.

MARK STEPHEN WOGAN, Manager, Energy Safety –High Hazards, Energy, and Public Safety, WorkSafe New Zealand.