

Health and Safety Office - Guidance Note

Topic:	Testing of gas systems
Date:	October 2010
Version:	1.3
Scope:	Recommendations for the selection of testers to carry out the statutory testing of gas lines.
Relevant Legislation:	The Pressure Systems Safety Regulations 2000
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1. Introduction:

This guidance has been written following enquiries as to whether annual inspections of (non-fixed) gas lines and regulators must be carried out by independent (i.e. external) inspectors or is it permissible to use fully trained and competent in-house staff to fulfil this function.

2. Background:

From Health and Safety Executive reference documents:

- (i) The Pressure Systems Safety Regulations 2000 L122 Approved Code of Practice
- (ii) Successful Health and Safety Management HSG 65

2.1 Definition:

To fit into the context of the regulations (i) as a Pressure System, it states in Section 24:

“Pressure system

The Regulations define three types of system:

- (a) a system comprising a pressure vessel, its associated pipework and protective devices. It is necessary for there to be a pressure vessel in the system for the Regulations to apply under this definition. Where there is more than one system on the premises, whether interconnected or not, the user/owner is responsible for deciding where the boundaries for each system occur;***
- (b) Pipework with its protective devices to which a transportable pressure receptacle is, or is intended to be, connected. A transportable pressure receptacle on its own is not a pressure system as defined. Pipework containing a relevant fluid (other than steam) at a pressure of 0.5 bar or less is outside the scope of the Regulations;***
- (c) a pipeline with its protective devices.***

Although there is no definition of pressure vessel in the Regulations, the term is well understood technically. For the purposes of these Regulations, a pressure vessel may be regarded as a vessel used, or intended to be used, to contain a relevant fluid.”

This means that all portable gas cylinders with pipelines attached are covered by these regulations, whether permanently fixed or not.

2.2 It clearly states in the interpretation notes of (i) section 35 that there are two distinct functions to the statutory testing, being the compilation of a test scheme, and the inspection itself. These can be done by the same competent person.

Section 37 goes on to specify that the necessary expertise can be found from within the organisation, but Section 40 does state that there should be a “suitable degree of independence from the operating functions of the company” and should be “separately accountable under their job descriptions for their activities as competent persons” and with “...no conflict of interests...” and impartial. Within the University, this can be interpreted that a fully qualified professional gas-fitter within the Estates Department could be employed to inspect systems within academic departments, whereas a person within the academic department with similar qualifications should not be used even if their role directly relates to this function.

2.3 Competence:

From reference (i) Section 43 suggests that a demonstration of competence may be accreditation within the requirements of BS EN 45004: 1995.

Reference (ii) gives generic guidance of acceptable competence, and calls for not only formal off-the-job training, but also knowledge of relevant (current) legislation and methods of control including risk assessment. This should be consolidated by regular involvement in tasks on-the-job, but also formal refresher training at appropriate intervals.

Within any organisation competency to perform safety critical inspection and testing calls for both regular involvement and up-to-date training, and within the University it would be difficult to perceive anyone being able to demonstrate these standards unless it were to be formally included as a major component of their daily duties.

3. Recommendations:

The testing of gas-lines within the University of Bristol should be managed locally by a building or resource manager who may select a suitable external contractor through Proactis via Procurement. Such a contractor should be required to write a Scheme of Examination and there should be an agreement between all parties that this is acceptable before they proceed with that testing.

Estates Operations may also be consulted on these works, and could carry them out, but they might also advise the use of an external contractor.

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