

Notification, investigation and reporting of gas-related incidents

IGEM/GL/8 Edition 4
Communication 1869



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SECTION 1 : INTRODUCTION

1.1 This Standard supersedes IGEM/GL/8 Edition 3, Communication 1776, which is obsolete.

1.2 This Standard is part of a series of Institution of Gas Engineers and Managers (IGEM) publications providing practical guidance to support the Gas Safety (Management) Regulations (GS(M)R) and the Pipelines Safety Regulations (PSR). IGEM/GL/8 also supports certain requirements under the Gas Safety (Installation and Use) Regulations (GS(I&U)R), Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Health and Safety at Work Act (HSWA) and Control of Major Accident Hazards (COMAH). It has been drafted by an IGEM Panel appointed by IGEM's Gas Transmission and Distribution and Gas Utilisation Committees and has been approved by IGEM's Technical Co-ordinating Committee on behalf of the Council.

1.3 This Standard is for gas transporters (GTs) (as the term is referred to in Guidance paragraph 16 in the HSE document 'A Guide to the Gas Safety (Management) Regulations 1996' L80 which also includes GT licence exempt pipeline operators), and also suppliers, consumers, gas operatives and others. The document covers the reporting and investigation of incidents associated directly with the supply and use of fuel gases and associated equipment and is complementary to IGEM/G/11.

Note 1: A new definition for 'gas transporters' used within this document is as follows: "A company, either licensed by Ofgem which transports gas through its network on behalf of a gas shipper or supplier, or a person or company which physically conveys gas through pipes but is exempt from the need to hold a gas transporter licence."

Note 2: In some places where legislation other than GS(M)R and/or HSE publications other than L80 are quoted or referred to, the terms 'convey' and 'conveyor' are used and the same meaning applies, as that is the term used in them to encompass both holders of a GT and those exempt from the need to hold a GT licence. RIDDOR and PSR are two such examples.

1.4 The reporting and investigation of gas related incidents is a core principle of sound health and safety management.

Guidance on such principles is set out in HSG65 Guidance on successful health and safety management.

1.5 The relevant parts of IGEM/GL/8 may be cited in a GT's safety case.

1.6 This Standard makes use of the terms "must", "shall" and "should" when prescribing particular procedures. Notwithstanding clause 1.7:

- the term "must" identifies a requirement by law in Great Britain (GB) at the time of publication
- the term "shall" prescribes a requirement which, it is intended, will be complied with in full and without deviation
- the term "should" prescribes a requirement which, it is intended, will be complied with unless, after prior consideration, deviation is considered to be acceptable.

Such terms may have different meanings when used in legislation, or Health and Safety Executive (HSE) Approved Codes of Practice (ACoPs) or Guidance, and reference needs to be made to such statutory legislation or official guidance for information on legal obligations.

- 1.7 Notwithstanding clause 1.6, this Standard does not attempt to make the use of any method or specification obligatory against the judgement of the responsible engineer. Where new and better practices are developed and proved, they are to be adopted without waiting for the modification of this Standard. Amendments to this Standard will be issued when necessary and their publication will be announced in the Journal of the Institution and other publications, as appropriate.
- 1.8 The primary responsibility for compliance with legal duties relating to health and safety at work rests with the employer. The fact that certain employees, for example "responsible engineers", are allowed to exercise their professional judgement does not allow employers to abrogate their primary responsibilities. Employers are required to:
- have done everything to ensure, so far as is reasonably practicable, that there are no better protective measures that can be taken other than relying on the exercise of professional judgement by "responsible engineers"
 - have done everything to ensure, so far as it is reasonably practicable, that "responsible engineers" have the skills, training, experience and personal qualities necessary for the proper exercise of professional judgement
 - have systems and procedures in place to ensure that the exercise of professional judgement by "responsible engineers" is subject to appropriate monitoring and review
 - not require "responsible persons" to undertake tasks which would necessitate the exercise of professional judgement that is not within their competence. There are to be written procedures defining the extent to which "responsible persons" exercise their professional judgement. When "responsible engineers" are asked to undertake tasks which deviate from this, they are to refer that matter for higher review.
- 1.9 It is now widely accepted that the majority of accidents in industry generally are in some measure attributable to human as well as technical factors. People who initiated actions that caused or contributed to accidents might have acted in a more appropriate manner to avert them.
- To assist in the control of risk and proper management of these human factors, due regard is to be taken of HSG48 and HSG65.
- 1.10 Requests for interpretation of this Standard in relation to matters within their scope, but not precisely covered by the current text, are to be either:
- addressed in writing to Technical Services, IGEM, IGEM House, High Street, Kegworth, Derbyshire, DE74 2DA; or
 - by e-mail to technical@igem.org.uk
- These will be submitted to the relevant Committee for consideration and advice, but in the context that the final responsibility is that of the engineer concerned. If any advice is given by or on behalf of IGEM, this does not imply acceptance of liability for the consequences and does not relieve the responsible person of any of their obligations.
- 1.11 This Standard was published in December 2022.

SECTION 2 : SCOPE

2.1 LEGISLATION

Relevant legislation addressed by this Standard includes:

- Health and Safety at Work etc. Act (HSWA)
- Management of Health and Safety at Work Regulations (MHSWA)
- Environmental Protection Act (EPA)
- Gas Safety (Installation and Use) Regulations (GS(I&U)R)
- Gas Safety (Management) Regulations (GS(M)R)
- Pipelines Safety Regulations (PSR)
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)
- Control of Major Accident Hazards Regulations (COMAH).

The legislation listed above covers a number of different fuel gases either specifically or generally.

This Standard is set out against a background of Legislation in force in GB at the time of publication (see Appendix 2). The devolution of power to the Scottish Parliament, Welsh and Northern Ireland Assemblies means that there may be variations to the Legislation described below for each of them and consideration of their particular requirements is to be made. Similar considerations are likely to apply in other countries and reference to appropriate national Legislation will be necessary.

All relevant Legislation must be complied with and relevant Approved Codes of Practice (ACoPs), official Guidance Notes and referenced codes, standards, etc. shall be taken into account.

Care is to be taken to ensure that the latest editions of the relevant documents are used.

Appendix 2 lists Legislation, Guidance Notes, and standards etc. which are identified within this Standard as well as further items of Legislation that may be applicable. Where Standards are quoted, equivalent national or international standards etc. equally may be appropriate. Unless otherwise stated, the latest version of the referenced document is to be used.

2.2 STATUTORY AND REGULATORY INCIDENT REPORTING

This document provides guidance on statutory and regulatory notification and reporting in Great Britain to the following organisations:

- HSE
- the relevant environmental agency (see Section 3.3)
- OFGEM
- BEIS
- Licensed gas suppliers.

Note: There may be additional reporting requirements beyond those required by the above organisations. e.g., commercial arrangements and local authority reporting etc.

2.2.1 **RIDDOR Reporting**

Employers (specifically including gas suppliers and the employers of Gas Safe registered gas engineers), the self-employed (specifically including self-employed Gas Safe registered gas engineers) and people in control of work premises (the Responsible Person) have a statutory duty under The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) to report certain serious workplace accidents, occupational diseases and specified dangerous occurrences (near misses).

Note: Guidance is provided in Appendix 3 and 4 of this standard and the HSE's website <https://www.hse.gov.uk/riddor/>

2.2.2 **GS(M)R Reporting**

GTs have a statutory obligation under the Gas Safety (Management) Regulations (GS(M)R) to report forthwith incidents to the HSE including the following:

- escape of gas from a gas fitting in domestic premises has resulted in a fire or explosion (GS(M)R Regulation 7(12)).
- escape of gas from the network has, or was likely to have, resulted in fire or explosion (GS(M)R Regulation 7(13)).
- where an incident notifiable under RIDDOR has arisen as a result of an escape of carbon monoxide (CO) gas from incomplete combustion of gas in a gas fitting (GS(M)R Regulation 7(14))

For GS(M)R reportable incidents, the HSE is required to be notified before any investigation commences. This is to ensure that the evidence is not disturbed, in case the HSE decide to undertake its own investigation into the incident.

Note: Appendix 5 provides more detail and information on GS(M)R Reporting.

2.2.3 **COMAH Reporting**

Where a major accident has occurred at a COMAH site, then the site operator is required to inform the COMAH Competent Authority of that accident through the local HSE office.

2.2.4 **Ofgem Reporting (holders of GT licences only)**

For any incident which involves the loss of supply to over 1000 customers, or one or more fatality or serious injury requiring hospitalisation to an employee or member of the public, as a result of failure or suspected failure of network operator's equipment (up to and including the ECV i.e., upstream of the meter)

The GT is to contact Ofgem within 12 hours of the incident occurring.

2.2.5 **Department for Business, Energy & Industrial Strategy (BEIS) (holders of GT licences only)**

GTs have an obligation to provide notifications of incidents within the BEIS gas incident reporting framework:

- any incident which may be covered in national media
- supply failure >1000 consumers.

2.2.6 Shipper Reporting (holders of GT licences only)

Within the Uniform Network Code (UNC) Transportation Principal Document (TPD) Section V5.13 there is a contractual obligation on GTs that are UNC parties to provide notifications of incidents to Shippers. Incidents may include:

- explosions or fires due to an escape of gas;
- incidents involving death or major injury due to confirmed or suspected CO poisoning from gas; and
- incidents resulting from failure to supply more than 250 consumers at any one time

Note: These incidents are often notified by Dispatch e.g., using the National Gas Incident System (NGIS).

2.3 SUBSTANCES

2.3.1 This Standard primarily addresses Natural Gas (NG) in either gaseous or liquid form and its combustion products (as defined in GS(M)R).

The items of legislation under Sub-Section 2.1 do not all have similar scopes with respect to gases covered. For example, GS(M)R address NG only whereas GS(I&U)R cover virtually all fuel gases. As the legislation listed covers NG, this Guidance applies in full for NG.

The intent is to also provide appropriate requirements for Liquefied Petroleum Gas (LPG) which is not covered by, for example, GS(M)R. However, for most issues, the requirements (as opposed to the legislation) are the same for LPG as for NG. Where there is a difference, LPG is mentioned specifically.

2.3.2 For gases other than NG and LPG, for example LPG/air, landfill or biogases, the majority of this Standard is appropriate but due account may need to be taken of differences in gas properties and legislative requirements. Solid fuel and biomass are not in the scope of this document.

2.4 INCIDENTS

2.4.1 General

For the purposes of this Standard, "incidents" and "dangerous occurrences" are termed collectively as "incidents".

2.4.1.1 This Standard covers reporting and investigation of incidents and dangerous occurrences associated directly with the supply and use of gas (see clause 2.2).

2.4.1.2 This Standard is intended to provide guidance for a company's safety management system and describe arrangements for notifying, reporting, recording and investigating incidents (including those which may be described as "near misses").

2.4.2 This Standard covers onshore incidents on gas supply networks, gas storage sites and any gas pipework/appliances involving CO poisoning.

2.4.3 All pressures are gauge pressures unless otherwise stated.

2.4.4 Italicised text is informative and does not represent formal requirements.

2.4.5 Appendices are informative and do not represent formal requirements unless specifically referenced in the main sections via the prescriptive terms “must”, “shall” or “should”.

Note 1: The term Notification means an immediate communication or report that takes place prior to any investigation being undertaken.

Note 2: The term Investigation means a review of the incident, including the production of a summary document, to determine the immediate and root cause and evaluation to identify actions to prevent recurrence.

Note 3: The term Reporting means post investigation communication of the outcome of the investigation to the enforcing authority and any other parties defined by your organisation’s safety procedure.

Note 4: The term report is used in regulations and industry documentation to refer to notifications and also post incident communications.

Note 5: For RIDDOR, notification and reporting are undertaken at the same time.