



***IGEM/SR/29 Edition 2
Communication 1827***

Dealing with gas escapes

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Price Code: C3S
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CONTENTS

SECTION	PAGE	
1	Introduction	1
2	Scope	3
3	Legal and allied considerations	4
	● 3.1 General	4
	● 3.2 Primary Legislation	4
	● 3.2.1 Gas Act	4
	● 3.2.2 Health and Safety at Work etc. Act (HSWA)	5
	● 3.2.3 New Roads and Street Works Act (NRSWA)	5
	● 3.3 Secondary Legislation	6
	● 3.3.1 Confined Spaces Regulations	6
	● 3.3.2 Control of Substances Hazardous to Health Regulations (COSHH)	6
	● 3.3.3 Electricity at Work Regulations	7
	● 3.3.4 Gas Safety (Installation and Use) Regulations (GS(I&U)R)	7
	● 3.3.5 Gas Safety (Management) Regulations (GS(M)R)	7
	● 3.3.6 Gas Safety (Rights of Entry) Regulations 1996	9
	● 3.3.7 General Data Protection Regulation (GDPR)	10
	● 3.3.8 Management of Health and Safety at Work Regulations (MHSWR)	10
	● 3.3.9 Pipelines Safety Regulations (PSR)	10
	● 3.3.10 Pressure Systems Safety Regulations (PSSR)	10
	● 3.3.11 Personal Protective Equipment Regulations	11
	● 3.3.12 Provision and Use of Work Equipment Regulations (PUWER)	11
	● 3.3.13 Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)	11
4	Procedures and Communication	13
	● 4.1 Legislation and best practice	13
	● 4.2 National Gas Emergency Service (NGES)	13
	● 4.3 Communications	13
	● 4.4 Gas emergency service provider (ESP)	13
	● 4.5 Recording response to reported gas escapes	14
	● 4.6 Competency to deal with escapes	15
	● 4.6.1 Gas emergency service provider	15
5	Actions on site	16
	● 5.1 Hierarchy of priorities	16
	● 5.2 Initial actions	16
	● 5.3 Subsequent actions	16
	● 5.3.1 Considerations	16
	● 5.3.2 Persons responsible for premises	20
	● 5.3.3 Contact with ESP line manager/operations centre	20

	● 5.4 Measuring and monitoring gas concentrations	21
	● 5.4.1 Instrumentation	21
	● 5.4.2 Monitoring gas concentrations in enclosed spaces	21
	● 5.4.3 Monitoring gas concentrations in open air situations	22
	● 5.5 Repairing the source of escapes of gas	22
	● 5.6 Unodorised gas	22
	● 5.7 Products of combustion	22
	● 5.8 Leaving site	23
	● 5.9 Further actions and responsibilities	24
6	Safe working practices	25
	● 6.1 Migration of gases	25
	● 6.2 Safety of people	26
	● 6.3 Sources of ignition	26
	● 6.4 Live gas working	28
	● 6.5 Underground plant	29
7	Gas escapes from non-gas transporter networks	31
	● 7.1 Safeguarding life and property	31
	● 7.2 Notification to third parties	31
	● 7.3 Identification of gases	31
8	Landfill biogas	32

APPENDICES

1	Glossary, acronyms and abbreviations, units and symbols	33
2	References	35
3	Relevant properties of gases	38
4	Description of underground plant	41
5	Safety advice for emergency services attending gas escapes	44

TABLES

1	Properties of commercial methane, propane and butane – a broad guide	38
2	Composition of landfill gas in the pseudo steady state – a broad guide	38
3	Known gas characteristics for NG and LPG/Air at standard temperature and pressure	39
4	Lower flammable limits of gases (in commercially available state)	40

SECTION 1 : INTRODUCTION

- 1.1 This Standard supersedes IGEN/SR/29 Edition 1, Communication 1760, which is obsolete.

This Standard has been drafted by a Panel appointed by the Institution of Gas Engineers and Managers' (IGEM's) Gas Transmission and Distribution Committee, subsequently approved by that Committee and published by the authority of the Council of IGEN.

- 1.2 This Standard provides requirements for gas transporters (GTs), gas conveyors, shippers, suppliers and information for the likes of local authorities, plant operators, utilities and emergency services on the responsibility, methods and personnel involved in dealing with a gas escape.

- 1.3 The requirements detailed in this Standard are based on current practices within Great Britain (GB).

Note: The protection of life and property are given priority throughout this Standard.

- 1.4 The relevant parts of this Standard may be cited in a GT's/gas conveyors safety case, but the Health and Safety Executive (HSE) will need to be satisfied that they are appropriate and have been properly applied in each case.

- 1.5 This Standard makes use of the terms "must", "shall" and "should" notwithstanding clause 1.7,

- the term "must" identifies a requirement by law in 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 HSE Approved Code of Practice (ACoPs) or guidance, and reference needs to be made to such statutory Legislation or official guidance for information on legal obligations.

- 1.6 The primary responsibility for compliance with legal duties 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 must:

- 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 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 engineers” to undertake tasks which would necessitate the exercise of professional judgement that is not within their competence. There should be written procedures defining the extent to which “responsible engineers” can exercise their professional judgement. When “responsible engineers” are asked to undertake tasks which deviate from this they should refer the matter for higher review.
- 1.7 Notwithstanding clause 1.5, this Standard does not make obligatory the use of any method or specification against the judgement of the “responsible engineer”. New and improved practices may be adopted prior to this Standard being updated. Amendments to this Standard will be issued when necessary and their publication will be announced in the Journal of IGEM and elsewhere as appropriate.
- 1.8 It is now widely accepted that the majority of accidents in industry are in some measure attributable to human as well as technical factors in the sense that people’s actions initiated or contributed to the accidents or people might have acted better to avert them.
- It is therefore necessary to give proper consideration to the management of these human factors and to the control of risk. To assist in this, it is recommended that due cognisance be taken of HSG48 and HSG65.
- 1.9 Requests for interpretation of this Standard in relation to matters within its scope, but not precisely covered by the current text, are to be addressed in writing to Technical Services, IGEM, IGEM House, High Street, Kegworth, Derbyshire, DE74 2DA or emailed to technical@igem.org.uk and 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 relieve the responsible engineer of any of his or her obligations.
- 1.10 This Standard was published in January 2019.

SECTION 2 : SCOPE

- 2.1 This Standard sets out the requirements for dealing with gas escapes safely.
- 2.2 Primarily, this Standard deals with gas escapes from Natural Gas (NG) piped supplies and systems.
- Note 1: In general, this Standard will not always be appropriate for escaped fuel that remains in a liquid phase, when further or alternative requirements may need to be applied. The Gas Safety (Management) Regulations (GS(M)R) lay down statutory requirements for dealing with reported NG escapes, which include escapes of carbon monoxide (CO). This Standard does not deal with the technical issues involved with reported CO "incidents", nor do the non-technical sections mention CO. However, the principles outlined in the non-technical sections apply to dealing with reported CO "incidents". Further information is provided in IGEM/GL/8.*
- Note 2: This Standard only deals with unignited gas escapes.*
- 2.3 This Standard provides requirements for gas transporters (GTs), gas conveyors, Emergency Service Providers (ESPs), National Gas Emergency Service (NGES), shippers, suppliers and information for the likes of local authorities, plant operators, utilities and emergency services on the responsibility, methods and personnel involved in dealing with a gas escape. Particular attention is drawn to the requirement for competency outlined in Sub-Section 4.6.
- 2.4 This Standard covers the requirements to take action from the identification of a gas escape to make the situation safe along with appropriate notification to the relevant parties including the HSE.
- 2.5 All pressures are gauge pressures unless otherwise stated.
- 2.6 Italicised text is informative and does not represent formal requirements.
- 2.7 Appendices are informative and do not represent formal requirements unless specifically referenced in the main sections via the prescriptive terms "must", "shall" or "should".