

CO Safety CSIWG Minutes for 26th of January meeting

Minutes for the CO Safety Meeting held as part of the Consumer and Social Issues Working Group	From Date and time of Meeting Location	santisl 26 th January 2011 Ofgem office	4 February 2011
--	--	--	-----------------

1. Present

Paul Rogers (by teleconference)	NGG
Mark Oliver	WWU
Mark Elliott	SGN
Andy Fuller	NGN
Stephanie Trotter	CO-Gas Safety
Leigh Greenham	COGDEM
Erika Melen	ENA
James Veaney	Ofgem
Steve Brown	Ofgem
Lia Santis	Ofgem

2. Overview of CO safety related outputs and incentives in RIIO-GD1 December strategy paper

2.1. James V led the presentation of the outputs and incentives set out on the December strategy paper. Ofgem proposed a series of outputs to encourage discussion and incentivise GDNs to develop projects that could be measured against those outputs.

2.2. WWU believed most of the measures proposed were reactive and only the first output encouraged a proactive approach. NGG stated that they were already recording the number of CO related calls to GDNs via 0800 number but they were not available for a formal report. CO-Gas Safety questioned how NGG could record the number of CO related call to GDNS via the 0800 number because there was and is no testing to establish CO or not.

2.3. Ofgem asked if all agreed that it was appropriate that GDNs be funded to develop initiatives to reduce the risks of CO. In answer to this question, CO-Gas Safety stated that in its opinion Regulation 7 of the Gas Safety Management Regulations 1996 should be interpreted as requiring the GDN staff to carry and use equipment to measure CO levels in the air and test appliances for CO. Therefore, if CO-Gas Safety is right, funding did not seem appropriate because it was unnecessary. However, if CO-Gas Safety is wrong about this, then funding is necessary and should be wholeheartedly supported. CO-Gas Safety submitted further information on Regulation 7 and their interpretation of the Gas Safety Management Regulations 199 which can be found in Appendix 1. They also submitted a copy of the Mills case which is attached as Appendix 2.

2.4. The GDNs said that their interpretation of their requirements under the regulations is to make safe and prevent the escape of CO by turning off the supply at the ECV. Ofgem agreed that this action conforms to the regulations but that licence conditions and HSE guidance on GSMR allow for GDNs to isolate individual defective appliances and thus leave the consumer with some gas use. SGN also pointed out that the GS(M)R [regulations 4 and 5] require GDNs to prepare and submit a safety case to the HSE which describes our arrangements for attending gas emergencies [underpinned by the company procedures referred to in the safety case]. The HSE have accepted their safety cases in regard to attending gas emergencies.

2.5. In CO-Gas Safety opinion, the actual regulation has a plain and straightforward meaning and HSE is not reflecting what the regulations passed by parliament really intended or intend. CO-Gas Safety said it would have been helpful to have the presence of the HSE in this meeting.

2.6. Ofgem reiterates that this meeting is to encourage GDNs to do what is appropriate for customers regarding CO Safety and find out what more can they do over and above the bare minimum. Ofgem said it will consider allowing revenues for the GDNs to conduct activities put forward through sound business plans that can demonstrate real value to customers.

2.7. WWU stated that whilst funding is important, the main issue is the need to agree on a consistent approach to answer the issues and address them accordingly.

2.8. COGDEM agreed with WWU regarding a consistent approach across GDNs. They believe that for the sake of consistency GDNs should be doing trials like SGN. These trials should be testing the levels of CO in the air in the property and not evaluating the performance of appliances.

2.9. Ofgem agrees for the need of consistency in recording benefits to consumers through quantifiable measures.

3. CO – Safety Trials

3.1. SGN clarified that the purpose of the trial they had undertaken to equip their staff with Personal Atmosphere Monitors (PAMs)) was to increase employee safety. They are not substantially measuring the success of the trials in terms of consumer safety and they will not be promoting this trial as a consumer safety initiative.

3.2. SGN pointed out that there is a difference between carrying a PAM and carrying equipment that measures CO in air to analyse an appliance for CO spillage. Carrying the spillage tool would have a different implication on the amount of time spent on each visit.

3.3. SGN believe that there may be circumstances when there are no obvious 'visual' signs of CO spillage or appliance fault, or, apparent symptoms of CO poisoning, and defaulting to make safe and isolating appliances and issuing the required notices to the customer to arrange for appliances to be inspected/maintained can be a [potentially unnecessary] burden to disadvantaged or vulnerable customers; this can sometimes be difficult for FCOs.

3.4. COGDEM believes this trial is a great step forward since the fact that employees carry a CO detector means that they can detect a CO hazard. COGDEM understood that at least one CO incident is detected per week in circumstances other than gas emergencies. This shows the initiative is successful in identifying cases of CO in property that otherwise would not have been detected.

3.5. WWU recognised the SGN trial is a massive step forward. However, carrying out additional services such as testing for spillage on appliances could be fraught with difficulties due to the specificities of different types of appliances and the potential liability issues.

3.6. Ofgem questioned the cost of such equipment. According to SGN each piece of equipment has a cost of £140–£150. COGDEM points out that adding a CO detector to equipment which GDNs may be already carrying would cost £35-£40.

3.7. Ofgem reiterated our interest in getting information from the GDNS in terms of ideas, initiatives to improve the job they are currently doing in CO. The information

captures should include costs, impacts, benefits to customers, as well as how to measure and incentivise appropriately.

3.8. SGN believes their previous position on the type of initiatives they may seek to undertake related to CO safety has shifted. They recognised that by previously focussing on simply issuing free CO detectors to vulnerable customers via fulfilment companies they miss the opportunity to address risk for these vulnerable customers or affecting other customers. They believe there might be other initiatives which would deliver more value to consumers.

3.9. Ofgem pointed to our willingness to consider significant funding CO initiatives in the past. There was scope for a reopener under the last price control for these initiatives if it was justified. At the time the CO working group did not pursue this option given the liability issues of the initiatives, the impact on the business, etc. We believe this price control review offers a new opportunity and we don't believe they should feel constrained to do more. Clearly we will need to assess the logic behind the initiatives and the identified benefits to customers.

3.10. GDNs insist on the importance of a co-ordinated approach since different approaches might confuse Gas Safe Register engineers and the suppliers.

3.11. There was a discussion among the GDNs regarding the practical implementation of the emergency procedures. Ofgem had concerns over this including whether they carried out risk assessments and if they are fit for purpose for delivering what the licence conditions require.

3.12. Appendix 1 provides an overview of the Guide to the Gas Safety (Management) Regulations 1996 and the Gas Transporter standard licence condition six, circulated by Ofgem after the meeting via email.

3.13. CO-Gas Safety noted the last World Health Organization (WHO) guidelines were recently revised (December 2010) to be more accurate and the selected pollutants have gone down from 9 parts per million to 4 parts per million. This relates to 24 hour exposure. Ofgem clarified that this figure may relate to long term (>8hr exposure) rather than a short term exposure.

Action	Person - By
SGN will provide snapshot of information in terms of how many times the alarm has gone off.	SGN
SGN will report on current initiative taking into account that it was not meant for customers but employees.	SGN

4. Other business

4.1. Ofgem will be focussing the next meeting's agenda on the GDNs to put forward any initiatives and proposals. We would like to see ideas and measures of the impact of these ideas in customers, associated implications, potential liabilities, quantifiable benefits.

4.2. COGDEM pointed out that previous initiatives have had a degree of success, especially distributing CO alarms to the elderly and the distribution of leaflets. A recent survey revealed that the population of CO alarms has increased in 1/3 of British homes in the last year. There were some doubts about these figures, ie whether these were total purchases (ie more than 1 purchased per home) or whether purchased alarms had actually been installed or even removed from their packaging.

5. Date of next meeting

5.1. Next meeting will be February 22nd from 14:00 – 16:00

Appendix 1

Regulation 7 of the Gas Safety Management Regulations 199 – Submitted by CO-Gas Safety

The Regulation states at 7 (6) 'where a person conveying gas in a network has reasonable cause to suspect that gas conveyed by him which has escaped has entered, or may enter, any premises, he shall, so far as is reasonably practicable, take all necessary steps to avert danger to persons from such entry.

At 17 (b) 'any reference to an escape of gas from a gas fitting includes a reference to an escape or emission of carbon monoxide gas resulting from incomplete combustion of gas in such a fitting;'

CO-Gas Safety submits that under this duty 'so far as is reasonably practicable, take all steps necessary to avert danger' from CO as well as gas, the Gas Emergency Service/Emergency Service Provider or ESP, should have been carrying and using equipment to test the air for CO since 1996 and later when flue gas analysers became less expensive, appliances for CO. CO-Gas Safety appreciates that the duty is only 'so far as is reasonably practicable,' but how can this duty be said to be fulfilled, when no equipment, which can sense a deadly gas, (which cannot be sensed using human senses), has been, is or will be used? Especially as such equipment is not very costly. The extra cost of PAMs is around £35 and the cost of flue gas analysers is £250 to £500 each.

Please note that the general legal principle is that if there is a conflict between guidance and regulation, regulation should be followed.

That in further support of the need to do this:-

(a) The Health and Safety Commission recommended this in 2000 after an exhaustive gas safety review.

(b) The death of Gerry Mills in 1999, was caused in the opinion of CO-Gas Safety, by the lack of the use of a flue gas analyser to test the flue gasses in the house of the deceased when the ESP was called in one month before death and the wrong appliance suspected (lack of ventilation re a fire, not excess CO from the boiler, which usually exited up the chimney except in adverse weather conditions, when the emissions of CO from the boiler finally proved lethal to Mr. Mills. Mrs. Mills was severely poisoned but survived.).

(c) CO-Gas Safety's experience of trying to help victims for 16 years, during which we've found:-

(i) Numerous people who have been left with the wrong appliance turned off by the ESP and left with the one emitting CO turned on and therefore continued to be exposed to dangerous levels of CO, even after visits by the ESP (e.g. Maria Falzon and Paul Wechsler) or

(ii) Left exposed to CO coming from another house or flat (e.g. Sue Chapman).'
Please note that we have permission from these people to use their names.

Response from SGN regarding CO-Gas Safety interpretation of Gas Safety Management Regulations

I respect, but do not agree with Stephanie Trotter's assertion in her response to your draft minutes that regulation 7(17b) "*any reference to an escape of gas from a gas fitting includes a reference to an escape or emission of carbon monoxide gas resulting from incomplete combustion of gas in such a fitting;*" applies directly to regulation 7(6) as regulation 7(6) relates to 'gas conveyed by him [the gas transporter]'; we do not convey CO - this will be produced by the appliances downstream of the ECV.

Ofgem's submission relating to GSMR Reg 7(5)

Following on from the discussions regarding making safe at a CO gas emergency, Ofgem thought it may be helpful to circulate the text below (my highlights/underlines) which is

guidance text from page 16 relating to GSMR Reg 7(5) in the HSE's publication GSMR Guidance on Regulations <http://www.hse.gov.uk/pubns/priced/l80.pdf>

45 The primary duty on gas transporters/emergency service providers in the event of an emergency is to **make the situation safe**. They will need to:

- (a) establish the cause of the escape and take action to make the situation safe by preventing gas from escaping; and/or
- (b) respond to reports of suspected or actual escapes of CO and make the situation safe.

46 If the reported gas escape is from a distribution main, consumers may suffer a loss of pressure, a total loss of gas supply, or both, while the leak is being repaired. Operatives attending such emergencies need to be prepared, fully trained and competent to ensure safe disconnection of the gas supply, and safe reinstatement including checking all appliances for obvious visible signs of spillage of products of combustion when appliances are relit.

47 If gas transporters/emergency service **providers find an appliance which is spilling products of combustion, whether in response to a report of a suspected escape of CO, or when relighting appliances after a loss of supply**, they should tell the consumer that further use of the **appliance** unless and until it is repaired is an offence, and seek to persuade the consumer **to allow them to disconnect it**. Gas transporters/emergency service providers have an obligation under regulation 7(5) to prevent the escape of gas. Therefore, if the consumer refuses to allow the **appliance to be disconnected**, the gas transporter (or emergency service provider) should exercise his rights-of-entry powers to deal with dangerous appliances. In such circumstances it would be appropriate to use **these powers physically to disconnect the individual appliance from the installation pipework**. Any appliance which is judged to be dangerous should be suitably labelled to this effect. A report on certain **dangerous appliances must be made to HSE (as required under regulation 6(2) of RIDDOR)**. In the case of rented property the **gas transporter/emergency service provider** should inform both the tenant and **the landlord (or their managing agent)** that an appliance is considered dangerous and **explain the appropriate action to be taken**.

GT Standard Licence Condition 6

http://epr.ofgem.gov.uk/document_fetch.php?documentid=14307

8. Subject to paragraph 9, the licensee shall make arrangements which will secure that in preventing an escape of gas in any premises to which it conveys gas (or, where it conveys gas to any primary sub-deduct premises, in any secondary sub-deduct premises to which the gas is subsequently conveyed) -

- (a) the prevention is effected, so far as it is reasonably practicable and safe to do so - (i) in such a way as to **maintain the supply of gas to those premises and to appliances designed for use by domestic customers for heating or cooking**; and (ii) by **carrying out any appropriate minor repairs to appliances**; (b) the prevention is effected, so far as is reasonably practicable, by a person adequately trained to recognise signs of leakage of carbon monoxide and instructed to report any such signs to the owner or occupier of the premises; and (c) if further repair work is required, information is given to the owner or occupier of the premises or, in their absence, left at the premises, as to persons in the locality who are members of a class of persons permitted pursuant to regulations under the Health and Safety at Work etc Act 1974 to perform repairs on gas fittings.

9. Nothing in paragraph 8(a) shall oblige the licensee to carry out any work which cannot be completed within 30 minutes of entering the premises for the purpose of preventing the escape or would use materials costing more than £4.65, adjusted in accordance with

standard condition 27 (Adjustment of Amounts by Reference to the Retail Price Index) by reference to the day on which the premises were entered for that purpose.

Thus this means that if the isolation of the faulty appliance cannot be effected within 30mins / £4.65 material cost, the ESP action would be entitled to **(but not required to)** leave the customer / whole installation shut off at the emergency control valve. Clearly there is scope to do more if the ESP chooses to, and time permits (perhaps due to a low number of other pending emergency calls).

Appendix 2



**The Carbon Monoxide
& Gas Safety Society**

Lorien House
Common Lane
Claygate
Surrey KT10 0HY
Tel (01372) 466135/466112
Fax (01372) 468965
www.co-gassafety.co.uk
Email s.trotter@uku.co.uk

Patron

Baroness Maddock

Board Members

President

Stephanie Trotter LLB (Hons)

Vice-President

Molly Maher

Company Secretary

Dr. Don Neal BSc PhD

Vice-Chairs

Colin Breed MP Lib. Dem.

Desmond Swayne MP Con.

Treasurer

Harry Rogers C Eng, MASHRAE,

FIGEM, MAE

John Ball MBE FIDHE

Jonathan Kane, CoGDEM

Parliamentary Friend

& Vice-Chair

Vernon Coaker MP Lab.

Board of Reference

Dr. Caroline Jackson MEP Con.

Graham Watson MEP Lib. Dem.

Glenn Willmott MEP, Lab.

Tony Pompe, Gas Safety Consultant

Professor John Henry, St Mary's

Hospital Paddington

Mike Thompson, Chief Executive, CORGI

Charles King MA, GMB

John Williams JEng MIIE

MIFireE CEO IGEM

B. E. Gosling

Stacey Rodgers

The Carbon Monoxide & Gas Safety Society (CO-Gas Safety) is an independent charity committed to reducing accidents from Carbon Monoxide and other gas dangers worldwide and supporting gas related accident victims. Company Limited by Guarantee, Registered in England. Registration No. 03084435. Charity Registration No. 1048370.

**Notes on the Mills Case by Stephanie Trotter of CO-Gas Safety
Private and Confidential**

In our opinion, this case clearly demonstrates why Transco should have flue gas analysing equipment. Gerry Mills died in April 1999 from Carbon Monoxide poisoning (CO) about one month after a visit from Transco. In March 1999, Mr. and Mrs. Mills had been ill and had then telephoned British Gas Service who, realising it was 'fumes' had called Transco. There was a gas fire in the living room and a boiler sited in the kitchen. The Transco operative had apparently used a smoke pellet and found the boiler flue to be sound. However, he had expressed some very slight concern over the lack of ventilation for the gas fire in the living room. Despite the fact that the couple had been ill in the night, the Transco operative gave the couple the 'all clear'.

Sadly about a month after the Transco visit, in April 1999, Gerry Mills died in his home from CO emissions. His wife survived but was badly affected. After the death of Gerry Mills, it took only a few minutes for the gas expert appointed to investigate by the Coroner, to find that Mr. Mills had been killed by CO emissions from the boiler. The expert found 26,900 ppm of CO going up the boiler flue. This is a lethal amount of CO and had almost certainly leaked in a downdraft. A downdraft occurs when the wind blows down the chimney or flue causing the products of combustion to blow back into the room or house. Also, after the death, the gas fire was found to be perfectly satisfactory. If only the Transco operative had carried and used a flue gas analyser, we consider this death would have been avoided.

Incidentally, the couple's daughter told Stephanie Trotter of CO-Gas Safety, that after Transco's visit, the couple had still wrongly believed that they had been visited by British Gas Service. Indeed when urged by their daughter to do more, they had insisted that they had been inspected by the experts.

We are also very concerned that all calls to Transco, whether 'gas leaks' or 'fumes', are passed on to the Transco operative as 'gas leaks'.

© Copyright CO-Gas Safety

Goyce Mills