Document No CO-1432-10



Subject	CO Sub Group	Circulation	All members
Date	19 th October 2010	Circulation Date	9 th Nov 2010
Location	CoGDEM offices Hitchin	Circulation by	Website & email

Attendees

John Saffell - Alphasense

Leigh Greenham - Electromagnolia Ltd

Mike Byrne - Ei Electronics (Chair of Sub Group)

Tom Gurd - City Technology Kevin Stockwell - Trolex Paul Basham - Crowcon Raxa Chauhan - Crowcon

Tony Banfield - GEL/31/19 Chairman

Mike Windsor - Anton

Jonathan Gilby - City Technology

Gavin Boorman - GfG Hans Hubner - GfG Roy Taylor - Testo

Paul Walton - Shawcity/Ionscience

George McGregor - GMI Mark McLean - Analox Steve Roberts - Envin

Clive Tester - Sira Environmental Richard King - Honeywell Analytics

Peter Bratt - RAE Systems Kevin Honner - Draeger Bernard Thomas - Kidde

John Walsh - FireAngel (Sprue)
Ian Ballinger - FireAngel/BRK (Sprue)
Stephen Gibbs - Industrial Scientific
Dieter Wenker - Gaswarn (guest)

Apologies

John Sonley - JMS Consultants Jonathan Kane - Kane International David Woods - General Monitors Rob White - City Technology Martin Harrop - General Monitors

Pat Roberts - Envin

Mark Stockdale - Ion Science Peter Walsh - HSE/HSL Arthur Burnley - Alphasense Lionel Witrant Oldham/ISC Adrian Keats - Honeywell SF Colin Mitchell - Ei Electronics

Roger Riley - Geotech Steve Billingham - Geotech Andy Croft - Groveley Detection

Peter Philpott - TPI

Andy Burnett - Kidde Safety Gerald Jones - Kidde Safety Steve Robinson - Draeger Gavin Peacock - Draeger Peter Sullivan - Testo Deborah Haismann - TSI

Steve Hamilton - Honeywell Analytics Terry Brown - e2v technologies Zoe Forman - Mandeville Marketing

Tony Bleakley - Anton

Stewart Forbes - Det-tronics

Carl Ritzberger - Honeywell Analytics

Ron Sinclair - Baseefa Ian Robertson - Analox Louise Early - Crowcon

Agenda

- 1) Apologies and member introductions
- 2) Approval of previous minutes and matters arising
- 3) Lobbying activities (inc. Building Regs, All Party Group, Charity agendas)
- 4) COCAA (CO Consumer Awareness Alliance), future changes and next campaign
- 5) CO alarms Standards review (including EN 50291 proposals, EN 50292 update)
- 6) Flue Gas Analysis (inc. outcome of FGA standards meeting, EN 50379 update)
- 7) Gas Industry Safety Group update (GISG), 2010 Safety Awards
- 8) Gas Safe Register update
- 9) Boats and leisure vehicles (presentation of test results to APPGSG)
- 10) AOB (including updates from HSE, HHIC, HETAS, Oftec, helpline, Roman villas!)
- 11) Date of next meeting Tuesday 15th Feb 2011

Document/ file: CO1433-10 meeting minutes 19-10-10 draft

1 Apologies and member introductions

The above list of apologies was read out. Members introduced themselves, and we welcomed a few new faces around the table, including Sira Environmental's new Lab Manager Clive Tester, and Dieter Wenker from Germany as a guest. LG announced that we had a new member, Greystone Energy Systems, a Canadian company with commercial CO and CO₂ detectors who were keen to enter the European market.

2 Approval of previous minutes and matters arising

The Minutes of the previous meeting (22nd June 2010) were read and accepted (Doc no. CO1432-10). Matters arising were covered during the rest of the agenda.

3 Lobbying (inc. Building Regs, All Party Group, Charity agendas)

Building Regs: The finalised Building Regulations, Approved Document J which covers combustion appliances came into force on 1st October 2010, and is now downloadable from the DCLG website at: http://www.planningportal.gov.uk/uploads/br/BR_PDF_ADJ_2010.pdf

One week before this date, CoGDEM mounted a small CO exhibition at the HETAS Roadshow, and it was interesting that some of the visiting solid-fuel heating engineers were unaware of the imminent changes to the Building Regs, and only after seeing the carbon monoxide banners did they understand the significance of the need to install CO alarms.

HPA Carbon Monoxide Workshop: CoGDEM continues to assist the Health Protection Agency in our joint quest to ensure that the medical profession has a better knowledge of CO hazards, how to avoid them and what to do when there has been an incident. Consequently, we will be presenting at their northern workshop on CO in Sheffield on 12th November. Due to the recently announced Government reorganisations and spending review, the HPA will be subsumed back into the DoH and NHS by 2012, but I have been advised that they hope to keep up their CO activities.

All Party Parliamentary Gas Safety Group (APPGSG): The post-election relaunch of the APPGSG on 13th July, was attended by LG and Zoe Forman, and several other CoGDEM members too. LG and ZF had a subsequent meeting with the APPGSG Manager (Adrian McConnell, Policy Connect) in order to inform him of CoGDEM's lobbying points. We have been asked to attend two small sub-meetings, one in November on the health issues of CO exposure, then in December on the particular gas safety hazards faced by the potentially vulnerable members of the community who live in caravans or boats.

Ofgem CO Working Group: After a quiet spell, Ofgem has re-established a working group looking into the gas distribution side of the industry and the efforts that the GDNs could be taking to alleviate CO problems. A meeting of the working group took place in September, and we discussed the GDN's CO leaflet distribution, the provision of free CO alarms to the vulnerable, the Scotia initiative to equip their field staff with CO monitors, and the necessity to 'close the loop' after a reported CO incident. Further meetings will take place, with Ofgem keen to hear of the GDNs' progress on these issues.

Charities: CO-Awareness Week takes place from 15-19th November, with that charity requesting CO alarm donations from manufacturers, as usual. CO-Gas Safety continues to promote their Schools Poster Competition, but Stephanie Trotter's publicly combative style makes it difficult for CoGDEM to work too closely with her charity. In contrast, the Dominic Rodgers' Trust is a pleasure to work with, and Stacey is heavily involved with the forthcoming CO-Be Alarmed campaign.

Fire & Rescue Services: Gavin Boorman remarked that the UK F&R Services were often woefully under equipped with gas detection apparatus, including CO detectors, and that perhaps we should add this to our lobbying activities. European F&R Services are typically well-equipped with such apparatus.

Document/ file: CO1433-10 meeting minutes 19-10-10 draft

4 COCAA (CO Consumer Awareness Alliance) future changes and next campaign

The major media campaign that was started by COCAA will continue, and this year's campaign will again be funded by the gas supplying companies making up Energy UK (new name for ERA, Energy Retailers Association), aiming to start targeting certain groups from October 2010 (landlords and builders, for example), with the main consumer campaign in January 2011 hopefully again with a celebrity endorsement. Last year's campaign was shortlisted for an award in the PR world, but lost out to a cancer charity's campaign, but was highly commended nevertheless.

Future CO-Be Alarmed campaigns will no longer refer to COCAA, as Gas Safe Register would not feel able to support them if they were. The ERA has therefore decided to no longer be a member of the COCAA alliance. This reinforces the point that is inappropriate for COCAA to remain under the administration of the Gas Safety Trust (ex CORGI Trust) now that their stated aims specifically exclude consumer awareness. It is hoped the new Gas Safe Charity might want to take it on, but it is possible that the name and format may need to change. With CoGDEM on the Steering Group and on the campaign media team, we will be involved in the discussion and meetings that should resolve the situation in mid-November.

5 CO alarms Standards review (including EN 50291 proposals, EN 50292 update)

The relevant CoGDEM members met for a separate meeting on the 22nd July for a review of the standards. As suggested at the earlier 2010 TC216 meeting, the UK was asked to make recommendations for future revisions to EN 50291, taking into account the suggestions that CoGDEM had made, as well as finalising the required update to EN 50292. After the 22nd July CoGDEM meeting, members were sent a full update report and this has recently been put into the appropriate template format for submission to Europe. It is hoped that this will allow a formal working group to be established.

The key items that we have suggested should be included in EN 50291 are:

- Consistent approach to the use of visual indicators for non-alarm events such as low battery, fault, endof-working life.
- Improved battery testing to take into account sealed-for-life batteries
- Test of auto reset of alarm mute function

To finish off the more urgent update of EN 50292, Peter Walsh and LG wrote some new text covering:

- Placement suggestions for CO alarms in boats and caravans, similar to those for bedsits
- Comments about the use of CO alarms with displays for those who need protection against low concentrations
- Inclusion of comments by Jamie Cooper of Gas Safe Register
- Inclusion of hydrogen to the section on interfering gases

We also suggested how a new standard for combined smoke and CO alarms might emerge by combining sections of the two individual standards. There are only three significant differences between the two standards, and it was felt that all can easily be addressed:

- There is an Ingress Protection requirement for CO alarms but not for smoke alarms, this can be removed as CO alarms no longer have to use mains-power due to the change of sensor technology compared with 10 years ago
- Smoke alarms are required by their standard to be louder than CO alarms, but actually the CO alarms typically are just as loud, as they share the same components.
- Siting recommendations can be drawn up if the combined alarms are used only in smaller premises.

We have also had some contact with the Irish national gas detection committee, who are keen to see the end-of-working-life feature become part of the standard, and would like to see the standard becoming a mandatory requirement for all CO alarms. This may help us with our identical aim.

6 Flue Gas Analysis (inc. outcome of FGA standards meeting, EN 50379 update)

CoGDEM continues to have meetings with Chris Yates of the HHIC (Heating and Hotwater Industry Council) to pursue ideas for future generations of FGAs and electronic versions of Benchmark. We are also engaged in the working group on the current problem with hidden flues in voids, which will generate a Technical Bulletin from Gas Safe Register in December stating the need for access points to check the flue and will also require domestic CO alarms in rooms that could be affected by releases of fumes.

Document/ file: CO1433-10 meeting minutes 19-10-10 draft

EN 50379 is the standard that governs the performance of Flue Gas Analysers, and it has been agreed to update this standard, in particular to include tests that can be performed on the new generation of instruments that use direct reading CO₂ sensors, rather than this being calculated from a measurement of oxygen depletion. With such CO₂ sensors likely to use infrared absorption techniques, the existing tests within the standard are not entirely appropriate. The relevant members of CoGDEM had a separate meeting on 22nd July to discuss the detail of German proposals and additional UK ideas for the standard. From this meeting, a list of UK suggestions was circulated to CoGDEM members, and then subsequently submitted to the Working Group by the UK representative Jonathan Kane at their first meeting in Germany in September, convened by Dieter Wenker.

Although this first meeting of the Working Group was intended to scope out the suggested changes for further discussion, there was agreement within the WG on the points raised by Germany and UK, so they were able to produce a new draft standard immediately after the first meeting, the speed of which surprised many. Of the two dozen or so suggestions from the UK, only four did not get included in the draft, and only one of these provoked a response from a CoGDEM member. Crowcon/Telegan feels that a test with humidified test gases should be included, citing that such a test is commonplace in other performance standards for gas detectors of all types. Dieter explained that FGAs were different to other gas detectors, in that their samples would always include warm humid gases from a flue. Various CoGDEM members explained that FGAs will also be used in drier air conditions, such as room ambient air CO or CO₂ build-up tests, and that instruments will be carried from inside warm dry houses to outside when testing the flue terminal, and that the storage of FGAs in cold vehicles overnight was another reason to be concerned about humidity and condensation. CoGDEM requested that Paul Basham should join the WG to help the discussion of these points. We will submit our formal comments when these are requested by the CENELEC administrator.

The European nations have responded favourably to the UK's suggestion of a new EN to bring BS 7967 to a wider audience, so that there could be a more consistent use of FGAs across Europe. A new Working Group will be formed in due course.

7 Gas Industry Safety Group (GISG), 2010 Safety Awards

The Gas Industry Safety Group celebrates its tenth anniversary with an awards event on 22nd November 2010, and several CoGDEM members companies have been nominated for product awards and will be attending the event in London's Guildhall.

8 Gas Safe Register update

CoGDEM has fostered a good working relationship with GSR, and the early problems with communication difficulties about awareness campaigning seem to be a thing of the past. We have regular meetings with them, and we are now members of their National Stakeholders Group. Highlights of recent meetings with GSR include:

- Their review of Enforcement activities has been concluded and sent to the HSE, CoGDEM had submitted comments.
- Their next review is of <u>Competence</u> of gas industry workers, CoGDEM will be attending a workshop event to discuss this in December.
- The first and second meetings of the National Stakeholder Group have taken place, covering items such as incorrect use of logos, safety campaigns for the elderly and the student sectors.
- Annual large event for Stakeholders, covering such items improvements as brand awareness and recognition (now claimed to be 45% on a HSE KPI target of 40%)
- Actions on flues in voids, as mentioned above.
- Supply of 110 CO alarms from peoples' homes to the HSE for testing (see later in these Minutes)

Also, the official launch of the Gas Safe Charity took place in September, and there seems a willingness to engage with CoGDEM, although this may be on the basis of jointly funded projects. The GSC will focus on the consumer side of gas safety.

9 Boats and leisure vehicles (presentation of test results to APPGSG)

Following on from the report that we gave to CoGDEM members at the previous meeting, it has been disappointing that the National Caravan Council has not done anything with the results that we achieved in the practical tests of CO production and dispersion in touring caravans in May. Staff changes have occurred, and we have now been told that a new person has been tasked with creating a report for the team to comment on. We

Document/ file: CO1433-10 meeting minutes 19-10-10 draft

have told them that we consider this to be back to front; we wanted a meeting of the parties involved with the testing to discuss the results and decide which should feature in the report, which could then be more widely published.

We await sight of the draft report, but in the meantime have progressed comments in EN 50292 as mentioned above. Graham Watts of the Boat Safety Scheme is also awaiting this report with interest, so that they can possibly incorporate its findings into their advice to boat owners.

This project was mentioned to the APPGSG, and as reported above, they have subsequently convened a meeting in December about gas safety in boats and caravans where LG has been asked to update the APPGSG on the CO results that we achieved in May. The NCC has been invited, so this should give them a deadline to work to.

The Boat Safety Scheme has a current interest in the detection of flammable gases and vapours aboard boats, so LG asked attendees if they had products designed for this market (compliant with EN 50194-2), and whether there was a volunteer to act as CoGDEM's expert in dealings with the BSS. ISC mentioned selling some products for marine applications. In the absence of other offers, Kevin Stockwell of Trolex has since come forward as a volunteer, as he has some detailed experience of the subject.

10 AOB

a) HSE CO alarm tests

At our previous meeting we reported that Gas Safe Register's inspectors were finding it difficult to locate sufficient alarms from people's homes to send to HSE/HSL for testing. But in the end, 110 alarms were recovered and HSE have recently completely their testing. The first figure seemed to show that 8 alarms had failed to respond to gas, but after we queried some inconsistencies in the results table, it was discovered that some old BS 7860 units had been incorrectly tested for compliance with EN 50291, which they could never have achieved.

The final draft report is now in preparation, showing that 2 alarms failed to respond to gas while outwardly appearing to work OK, although the age and condition of these alarms is not clear. 6 were received with depleted batteries that the users had failed to replace when necessary, and 4 failed to respond to the push button test, possibly because they were outside of their manufacturer's stated working life. We are now working with the HSE to find suitable wording for the publishable report that states these results in an accurate and appropriate format. We had asked HSE to show the 2 failed alarms a higher concentration of CO test gas to see whether they were either completely non-functional or had just lost some of their sensitivity, but HSE has turned down this request, even though we offered to fund it if necessary.

b) Flues in Voids

As mentioned above (and at our previous meeting), LG gave an overview of the ongoing project to deal with flues in hidden compartments or voids, which in a few cases have led to fatal levels of CO entering domestic residences. A working group consisting of the HHIC (heating appliance manufacturers' trade association), Gas Safe Register, HSE, CoGDEM and others, have agreed a Technical Bulletin to be published by GSR in December, advising on the timescales for fitting inspection hatches in all affected building, as well as CO alarms in rooms that border a concealed flue.

c) GASG seminar 'Gas Sensors in Marine Applications'

The Gas Analysis and Sensing Group seminar which was to have covered gas detection on boats of all sizes was postponed from October until April 2011.

d) HETAS

As mentioned above, LG had manned a CO awareness stand at the recent HETAS Roadshow in Basingstoke, and 20% of the visiting engineers were not aware of the changes to Building Regs requiring them to fit CO alarms with solid-fuel appliances.

The 2011 edition of the HETAS guide is now going to print, with input from those CoGDEM members who chose to participate.

Document/ file: CO1433-10 meeting minutes 19-10-10 draft

e) Oftec

The oil-fired appliance industry has always shown great reluctance in getting thoroughly engaged in the CO awareness raising activities organised by others, such as COCAA, but they did at least allow us to exhibit at the Oil and Renewables Show at the Ricoh Stadium in Coventry. As with the HETAS Roadshow, several visiting engineers knew very little about the Building Regs change, including one who had just installed a solid fuel Rayburn and would now have to return a fit an alarm before the local Building Control Officer discovered the omission. Visitors to our stand also included some gas engineers with questions about commercial kitchen gas detection, the risks from domestic back-boilers, and flues in voids.

f) CoGDEM's CO Helpline

LG gave an update on recent calls to the helpline, including another hydrogen incident, this time resulting from the chemical reaction between curing concrete and aluminium-backed insulation sheets. As the seasonal temperature cools and heating appliances fire up for the first time, a burst of calls is typical, this year including a mother who had given her son a CO alarm for his university digs that alarmed as soon as it was powered up, and a guy whose five-year old wood-burning stove was discovered to have had a 3 inch gap in the flue from new.

g) Roman Villa CO investigation

The helpline had received a call from a TV production company commissioned by Channel 4 to produce a 6 x 1-hour mini-series on how to build a Roman villa using authentic materials and tools. This was constructed over the summer near Shrewsbury, and they required CO and thermal imaging equipment to be used on the final building, heated by a traditional underfloor hypocaust as well as charcoal and wood braziers. Testo was able to loan a CO probe instrument and thermal imaging camera, and FireAngel donated half a dozen domestic CO alarms with low concentration CO display and temperature reading facility. Filming and surveys were conducted at the end of October and will be reported on at our next meeting in February 2011, just prior to the screening of the series.

h) European Parliament CO Project

Zoe Forman had been invited to represent CoGDEM and the CO-Be Alarmed campaign team at a meeting of the European Parliament in Brussels at the end of October. It is likely that the UK will be seen as a role-model in raising awareness of the CO hazard in domestic dwellings and reducing fatalities. This is especially the case when compared with countries such as Belgium which has reported 440 deaths per annum from unflued gas-fired water heaters, a type of appliance that was removed from the UK marketplace many years ago.

i) Gas Safety Trust

Perhaps as a reaction to the official launch event of the 'competing' Gas Safe Charity (see section 8 above), the confusingly re-named Gas Safety Trust (ex-CORGI Trust) felt the need to hold their own event in London in October to launch their glossy CO incident and hotspot research report, which can be downloaded from http://www.gas-safety-trust.org.uk/sites/default/files/resources/gas-safety-trust-co-hotspots-report.pdf

This shows the lower ever UK CO fatalities, 7 overall from July 2009 to June 2010, with 4 of these from gas fuelled appliances, 3 from other fuels. These figures do not agree with the HSE's figures, which although still pleasingly low, show a higher figure of 9 fatalities.

j) Lord Young's report on the modern health and safety culture

LG recommended that CoGDEM members should take a look at the recent report commissioned by Government to look into state of the health and safety culture within the UK today. Lord Young makes some useful statements about how risk assessments should be based on reasonableness and likely risk, rather than considering worst-case scenarios and preparing for such. The report can be downloaded from the HSE website at http://www.hse.gov.uk/aboutus/lordyoung/index.htm

11 Dates of 2011 meetings: Next meeting - Tuesday 15th February 2011, 10am start

Then Tuesday 21st June 2011 and Tuesday 18th October 2011