

Minutes of Meeting

Document No CO-1454-17

Subject	CO Sub Group	Circulation	All members
Date	17 th October 2017	Circulation Date	5 th Nov 2017
Location	CoGDEM offices Hitchin	Circulation by	Website & email

Attendees

Leigh Greenham - CoGDEM
Mike Byrne - Ei Electronics (Chair)
David Richardson - Ei Electronics
Colin Mitchell - Ei Electronics
Ian Ballinger - Sprue
John Saffell - Alphasense
Kazuaki Watanabe - Figaro
Yoshihiro Yamamoto - Figaro
Masahiro Uehara - New Cosmos
Rob Lyon - Playfair Marketing
Paul Basham - Crowcon
Andy Avenell - Crowcon
Mike Bellamy - Crowcon
Kevin Brown - DD Scientific
Tim Jack - Gas Tag
Jon Bawden - Testo
Jonathan Gilby - HH60 Consultants
Martyn Walley - Aico
Jason Perrins - FireBlitz
Brendan Simpson - FireBlitz
Doug Longstaff - Draeger
Gary Fairhurst - Kane International
Adrian Keats - Honeywell Analytics
Andrew Yardley - City Technology
John Darby - City Technology
Arthur Burnley - Alphasense
Steve Cork - CSA/Sira
John Crawley - Kidde Safety
Tony Banfield - EXL/31/1 Chairman
Damian Cairns - Anton
Rob Farquharson - Air Liquide

Apologies

Richard King - Honeywell Analytics
Jeff Regan - JMS Consultants
John Sonley - JMS Consultants
John Walsh - Sprue
Bernard Thomas - Kidde Safety
Peter Philpott - TPI
Craig Millar - Geotech
Kevin Milesen - GES
Andrew Keenan - CSA/Sira
Rob White - DD Scientific
Phillip Wild - Duomo
Neil O'Regan - Shawcity
Mike Murley - Testo
Jonathan Kane - Kane International

Agenda:

- 1) Apologies and member introductions
- 2) Approval of previous minutes and matters arising
- 3) Lobbying activities (inc. All Party Parliamentary CO Group)
- 4) Publicity update (inc. Europe, Holland, France and new UK group)
- 5) CO alarms standards review (inc. latest EN 50291-1 changes)
- 6) Flue Gas Analysis (inc. pressure meters, MCPD changes)
- 7) Electrochemical toxic gas sensor lifetime testing, effects on CO alarm testing
- 8) AOB (inc. updates from HSE, helpline)
- 9) Dates of 2018 meetings – Tues 20th Feb 2018, Tues 5th June 2018, Tues 23rd Oct 2018

Minutes of Meeting

Document/ file: CO1454-17 meeting minutes 17-10-17

1 Apologies and member introductions

The above list of apologies was displayed and read out. Members introduced themselves around the table.

2 Approval of previous minutes and matters arising

The Minutes of the previous meeting (13th June 2017, CO1453-17) were read and accepted. Matters arising were covered during the rest of the agenda.

3 Lobbying (inc. All Party Parliamentary CO Group)

All Party Parliamentary Carbon Monoxide Group (APPCOG):

To enable commercial organisations to be involved with relevant Parliamentary affairs, APPCOG has the 'CO All Fuels Action Forum' funded by industry (including certain CoGDDEM members) and overseen by an Advisory Board that LG is part of. To simplify the Group structure it has recently be decided to rename it the 'APPCOG Stakeholders Forum'.

Since the general election a new MP has joined APPCOG and presented a 10-minute Rule Bill in the House of Commons on CO. Eddie Hughes MP happens to be a Trustee of a social housing organisation in the Midlands, so he spoke with passion of the need for all tenants to be protected by CO alarms.

Since our last CoGDDEM meeting, the Grenfell Tower tragedy may have affected the review of the 2015 English CO and smoke alarm regulations that apply to properties in the Private Rented Sector. APPCOG organised a meeting with DCLG which LG attended in July, they are supportive of the proposed amendment to include CO alarms irrespective of fuel type, and that his should be mirrored in Building Regs. Timescales for both reviews are unknown, but the APPCOG report on the need to change the PRS alarm regs will be launched at a Parliamentary event on 7th Nov that LG will attend.

The summer focus on CO safety at music festivals was reasonably successful, with banners and posters at the bigger festivals warning of the CO risk from barbecues inside tents. However there was a fatality and a serious injury at a small niche festival in Kent, initial reports suggested this was due to the barbecue/tent scenario. APPCOG will include the smaller festival organisers in future campaigns.

At the last CoGDDEM meeting LG mentioned a concern about interlinked alarms in HMOs, where reports from Scotland said 23 callouts to a single building had been attended by Scotia Gas Networks after reports of CO alarm activation, whereas it had been suggested that it was incorrectly located 'heat alarms' in kitchens which had been triggered, and the interlinking of these to the CO alarms gave multiple residents a false impression of the reason for the activation. Mike Byrne thought false triggering of heat alarms was less likely than genuine triggering of smoke alarms. LG met with the guy who raised the concern on behalf of the Association of Independent Gas Transporters (AIGT), at a meeting conveniently hosted by Martyn Wally (Aico) in Oswestry, and there was agreement to create guidance notes for the developers who install such safety systems.

APPCOG hosted the first meeting of its new Comms Working Group, attended by LG and Rob Lyon. A greater spirit of collaboration was promised between all parties who conduct gas safety or CO publicity, such as Gas Safe Register, Energy UK, RoSPA, IGEM, CoGDDEM, ENA and the individual gas retailers and distributors. Comments were made about the successful collaboration in Ireland where a major media campaign even included primetime TV adverts. A second meeting of this Comms Group is currently being arranged.

The Medical sub group of APPCOG (COMed) finally launched its report on the state of play of CO awareness and research amongst the medical profession. The launch event was held in Parliament on 11th Oct and several CoGDDEM members attended. One area of discussion at the event was the CO alarm activation thresholds required by EN 50291 to limit a person's carboxyhaemoglobin level to less than 5% COHb, leading to a statement from LG that CO alarms should not be regarded as health monitors. The Daily Mail ran a full page article on the risks of CO poisoning as a result of the COMed report's launch.

After our suggestion during the summer, Baroness Finlay wrote two letters from the House of Lords to the Morrisons supermarket chain and the manufacturers of black-spot indicator patches, outlining her concerns about the products. Earlier this month, Colin Mitchell pointed out that Amazon is actively promoting them, so at our request, APPCOG agreed to rewrite the letter for the Baroness to send to Amazon.

Minutes of Meeting

Document/ file: CO1454-17 meeting minutes 17-10-17

Others:

Safer Tourism Foundation (Thomas Cook funded) LG attended a 'pledge event' where many of the UK travel companies joined with Thomas Cook to pledge their support to improve the safety of tourists abroad, particularly from CO poisoning. A recent CO incident in a Spanish hotel with a party of British children has focussed their minds.

Gas Safe Register's 'Gas Safety Week' ran in September, preceded by a Parliamentary launch event the week before at which nearly every speaker mentioned the importance of CO alarms. CoGDEM donated 100 CO alarms to support various events during that week. LG subsequently met Gordon Lishman, Chair of the Trustees of Gas Safe Charity who would like CoGDEM's involvement with two projects, the fitting of CO alarms into children's safety learning centres across the UK, and the training of 'trusted intermediaries' such as health visitors, who should be more aware of CO and could look out for hazards when visiting peoples' homes.

IGEM (Institution of Gas Engineers & Managers) has confirmed that the theme of their CO conference in London on 21st November 2017 will be 'Research into Action'. Free places can be booked on the events page of the IGEM website.

The Marine Accident Investigation Branch (MAIB) published another hard-hitting report, this time on the 2016 fatality aboard the cabin cruiser 'Vasquez' in a Cardiff marina where a off-duty fireman trying to give CPR almost died as well. The lack of CO alarms was a key part of the report. LG recently gave a presentation on CO alarms to the British Marine Inland Boatbuilding group's AGM, and he reminded attendees of the hydrogen cross-sensitivity effect, especially when new generation boats have massive battery banks installed. Another recreational boat fatality has officially been confirmed to be a CO death, a cabin cruiser in Jersey ('Mais Oui') where the petrol engine exhaust fumes entered the cabin through an awning (Feb 2017), no CO alarm fitted.

4 Publicity update (inc. Europe, Holland, France and new UK group)

Europe:

Colin Mitchell gave a brief update on the European monitoring and lobbying activities run by ADS Insight. Members of the European PR group had already received full details and are planning the 7th annual Roundtable event in the EU Parliament building to be held on 5th Dec, hosted by the Irish MEP Marian Harkin.

Netherlands:

Since the publication of the NVWA's report on CO alarm reliability in May, CoGDEM has not heard any repercussions, although the Dutch government continues its plan to introduce more regulation to the domestic gas industry, such as competency requirements for heating engineers.

France:

Shane Lyons of Ei Electronics continues to work hard to set up a publicity group in France. LG joined a conference call in September at which some of the finer details were discussed. A core group of alarm manufacturers, distributors, energy bodies and health organisations has expressed interest in joining the group.

UK:

Starting this month, the CO alarm and FGA manufacturers who are part of a separate PR working group have now commissioned Rob Lyon through his new independent company Playfair Marketing. Rob made a brief presentation today of his history as Campaign Director of Project SHOUT and Marketing Director at Sprue Safety. Rob displayed a video of 2016's successful Project SHOUT media involvement and mentioned the increased success in 2017 so far, including the students' video competition prizegiving event.

The National Caravan Council (NCC): The new CO leaflet for caravanners has been delayed, despite getting to final draft form in time for the planned September print run. Apparently the NCC's marketing department want to make some changes, LG is waiting to hear how significant these changes are.

HETAS has started to prepare its 2018 Guide, so relevant members have been invited to update their entries in the large section on CO detection and measurement apparatus. HETAS has also asked for CoGDEM's assistance with two of its printed guidance notes, one for general consumer CO awareness and another to help installers find the optimum location to install a CO alarm. Both documents include a newly created diagram of a typical room with a solid-fuel appliance, showing both optimum and avoidable locations for the mandatory CO alarm, so the diagram was displayed on screen.

Minutes of Meeting

Document/ file: CO1454-17 meeting minutes 17-10-17

Mail on Sunday: a freelance journalist approached CoGDDEM in August to write an article on non-compliant CO alarms available online, wanting to test such alarms first. The MoS ignored our advice to use a properly equipped and accredited test laboratory, and instead used a consultant who used Detectagas. We complained about the inappropriateness of this approach and the article has yet to appear.

Scotia Gas Networks (SGN) has created a CO alarm guide so that their field engineers can see pictures of appropriately compliant CO alarms that they might come across. It was suggested that this might become a generic document for the gas industry, but CoGDDEM would need to vet the CO alarm entries, including those of non-compliant alarms that we know are in people's homes.

Energy UK issued the final part of its 2017 CO-Be Alarmed! campaign publicity this month, with a press release about the rented sector, although members felt its headline figure was actually over optimistic ("one third of renters don't have a CO alarm", we believe it's closer to two-thirds).

Cranfield University continues its PhD project on CO generation from charcoal, and LG attended a testing day on site, at which huge concentrations and volumes of CO were generated by placing a cooling barbecue inside a shipping container with varying levels of ventilation. Due to the necessary confidentiality of a PhD thesis, publicity will not be issued for another two years.

5 CO alarms Standards review (including EN 50291-1 update)

The final draft of CO alarm standard EN 50291-1 has now been circulated by CENELEC for national bodies to vote on its acceptance. Even if France and ANEC vote negatively again (they want to drop the lowest alarm activation threshold from 50ppm to 30 or even 10ppm), the democratic process means publication can take place if there is a simple majority vote. Once this part 1 standard is ready for publication, it may not be possible to release the part 2 simultaneously (recreational vehicles) as although this is complete, some modifications to part 2 will be required so that it still lines up with the amended part 1.

6 Flue Gas Analysis (inc pressure meters, MCPD changes)

As reported at our previous meeting, Germany has suggested a revision to the FGA performance standard EN 50379 to allow for 'smart' devices such as those that don't have built-in displays but use the engineer's smartphone's display. CENELEC has agreed with this proposal and has set up a Working Group (WG13) and has circulated a call-for-experts.

The Working Group (WG 14) which will create a new standard for gas pressure meters ('tightness testers') has been sanctioned by CENELEC; a call-for-experts has been issued. The first draft has been circulated to relevant CoGDDEM members, this was created by extracting the relevant clauses from the FGA performance standard EN 50379.

Dave Curtis (CoGDDEM Company Secretary and runs the STA – Source Testing Association) had suggested that FGA manufacturers should be made aware of the Medium Combustion Plant Directive (MCPD) requirement for portable emissions monitors to be MCERTS compliant from 2018. Jon Bawden of Testo said they were dealing with the implications (and opportunities) that this might offer his company across Europe.

7 Electrochemical toxic gas sensor lifetime testing

LG and John Saffell gave a brief overview of the inaugural meeting that had been held the day before this CoGDDEM meeting and reported on the positive and collaborative spirit that had been shown by sensor manufacturers and instrument manufacturers. One of the goals of the group is to hopefully provide sensor test data in a format that might allow CO alarm test laboratories to 'pre-authorise' CO sensors that have been subjected to a suitable test procedure. This could mean that certain of the long-term tests which the CO alarm must undergo in order to demonstrate compliance with EN 50291 could be avoided, if the alarm contains a sensor that has been previously tested. There is a similar arrangement through UL, which allows for CO sensors to be categorised as 'Recognised Components'.

Minutes of Meeting

Document/ file: CO1454-17 meeting minutes 17-10-17

Minutes of yesterday's sensor meeting will be distributed to the interested parties separately, but a table of the seven agreed actions was displayed at today's CoGDEM meeting:

TASK	RESPONSIBLE
Redefine deliverables	LG/JS
Pose questions	JS
Reformat Failure Mode analysis	LG/JS
Define tests and test profiles	JG + others
Use maths/ stats to define test parameters	JS + others
Instrument manufacturers' requirements	anyone named Paul
Environmental test ranges	JS + others

8 AOB (including updates from HSE, helpline)

a) HSE

Mike Hemingway from HSE/HSL could not be present today, but he sent an email update including the comment:

"We had a message from the UK indoor environment group (UKIEG) alerting us to an impending consultation for revised NICE guidance on indoor air quality in homes. It's specifically not about "Preventing acute exposure to carbon monoxide from malfunctioning combustion appliances" but does highlight CO amongst other pollutants."

LG responded to Mike that CoGDEM was a stakeholder in the NICE project and that we had attended the scoping meeting earlier this year when the 'acute CO poisoning' exclusion was discussed.

b) CoGDEM's CO Helpline

LG mentioned that the helpline has recently received calls with a bias towards users of solid fuel appliances such as an elderly lady who called twice about health issues potentially caused by her old Rayburn stove.

In July a caller enquired about the use of CO alarms on board commercial fishing boats, he received information from LG then rang back the following day to sheepishly admit he was the lawyer defending the owner of a boat who would be in court the next week accused of manslaughter after two fishermen died from CO poisoning from a faulty bottled gas appliance that the owner knew was in use. LG informed the lawyer that none of the information he had given in the first call was to be used in the court case unless it was public domain knowledge, and that it was unsatisfactory for the lawyer to have not declared upfront who he was, rather than give the impression he was just a boat owner wanting to 'do the right thing'. LG made copious notes. The boat owner was found guilty and jailed the following week.

A separate unsatisfactory call was received early on a Sunday morning from a doctor, enquiring what he should do about a neighbour's flue that appeared to have been emitting black fumes at 7pm the previous evening. LG gave advice then politely asked why the doctor hadn't thought it sensible to go and knock on his neighbour's door at the time, but left it 13 hours before ringing our CO helpline. This provoked a very aggressive response from the doctor who said this was not his role, someone else should do it!

c) CO alarms used as personal protective devices

Damian Cairns (Anton) stunned the meeting by saying that some heating engineers proudly hang a domestic CO alarm around their necks to act as a safety monitor. When challenged by Anton, these engineers say they regard this as adequate protection rather than use one of the more expensive personal workplace CO detecting instruments that are specifically designed for worker protection. CoGDEM and its new CO and Combustion PR group run by Rob Lyon (see item 4 above) will write a paragraph which can be placed on the website stating the inappropriateness of this behaviour.

Minutes of Meeting

Document/ file: CO1454-17 meeting minutes 17-10-17

d) Confusion between CO and CO₂

Martyn Walley (Aico) mentioned that there is now even more confusion than before between CO and CO₂, especially since the Scottish Building Standards requirement for CO₂ monitors to be fitted in new build homes to give an indication of poor air quality. Some heating engineers just quote the abbreviation CO₂ when they really mean CO, and LG immediately demonstrated how easy it is to make that slip of the tongue! LG and RL will again construct some text to be placed on the website.

e) Internet suppliers of non-compliant CO alarms

At most CoGDEM meetings we receive an update on the availability of the non-compliant CO alarm that has featured in the Which? magazine and BBC 'Fake Britain' investigations (white circular unit with a blue backlit LCD). The 'Mail on Sunday' article will again feature this unit, highlighting the fact that it usually appears at the top of an Amazon search for CO alarms if they are listed in order of lowest price, despite Amazon being aware of the alarms being recalled when marked with various brand names. However, Ian Ballinger wonders if the word may be finally getting through, as he has received several questions from Amazon vendors about the need for their CO alarms to be compliant with EN 50291. Martyn Walley has received questions from similar sources.

f) GASG

The most recent meeting of the Gas Analysis and Sensing Group was held in July at Bristol UWE with the title 'Natural Gas – gas in nature'. The final colloquia of 2017 will be held at the IET HQ in central London on 7th December with the title 'Gaseous and the Underworld - gas detection under land and sea'.

g) Portable power generators and CO emissions

It is well known that in the US, Canada and Alpine regions of France, episodes of extreme weather are often followed by multiple incidents of fatal CO poisoning when portable petrol generators are inappropriately located while providing temporary electric power. The US Portable Generator Manufacturers Association (PGMA) had been asked by the US government to encourage its members to address the issue after more than ten Americans died from generator CO in the aftermath of Hurricane Katrina hitting the New Orleans area in 2005, nine deaths after Hurricane Ike in 2008 and a large number of poisonings after Hurricane Sandy hit the east coast in 2012.

LG reported that earlier this summer, he and John Saffell were separately approached by a UK consultant working for PGMA, enquiring whether any CO sensors existed which could be mounted directly onto a portable power generator, capable of switching off the generator if high concentrations of CO were detected. The consultant was told that although this sounds like a sensible suggestion, there would be many problems with this technique and that other routes of CO safety should be considered, for example, catalytic converters which would stop most of the CO from being emitted and correctly located CO alarms in nearby spaces.

Hurricane Irma hit Florida in September this year, and once again, CO from petrol generators caused multiple deaths (nine reported) in the days following the storm. This has provoked a very hard-hitting letter from the US Senate to the PGMA demanding immediate action and referring to previous requests from the US government to stop such incidents. Voluntary PGMA codes of practice which most generator manufacturers apparently don't follow may now be replaced with national regulations. The letter suggests catalytic converters and separate CO alarms should be supplied with each generator, along with a power lead longer than 25 feet and improved warnings on the generator. The letter can be seen online at:

<https://www.blumenthal.senate.gov/imo/media/doc/2017%2009%2025%20Blumenthal%20letter%20to%20PGMA%20re%20CO%20Poisoning.pdf>

9. Dates of 2018 meetings – Tues 20th Feb 2018, Tues 5th June 2018, Tues 23rd Oct 2018