



MEETING LOG

SUBJECT: UL 2034 STP – Single and Multiple Station Carbon Monoxide Alarms

OP PLAN ENTRY: Carbon Monoxide (CO) Alarms

DATE OF MEETING: 2/26/2025

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Matthew J. Brookman (LSM)

FILING DATE: 2/27/2025

CPSC ATTENDEE(S): Matthew J. Brookman (LSM)

NON-CPSC ATTENDEE(S): Contact SDO for the full attendee list.

Summary of Meeting:

Matt Brookman participated in the UL 2034 Task Group meeting on February 26, 2025 from 11:00 AM to 12:00 PM EST.

The committee discussed the four proposals discussed at the last Committee meeting on January 13, 2025. These include requiring 10-year sealed batteries, new requirements for digital displays, requirements for voice alerts, and improvements to user manuals and device markings.

The task group began by prioritizing the four proposals and discussed breaking into smaller groups to address each one. The group decided to discuss each proposal first, before dividing them. The proposal for new digital display requirements was recommended as the number one priority by the proposing member. The task group continued by providing input to determine the process for evaluating the proposal and contributed information that would support a path forward.

At the beginning of the discussion, a member suggested that the proposal to require digital displays, improving accuracy, and allowing displays to indicate levels lower than 30 ppm should be submitted to NFPA 72 *National Fire Alarm and Signaling Code*.

Members presented information about the history of the development of the current display requirements in UL 2034. Initially, the standard allowed displays to indicate any level of CO, but was then changed to prohibit the indication of CO below 30 ppm. A member stated that part of the justification for this was to reduce the number of unnecessary emergency response calls from consumers seeing displayed values of transient, low levels of CO that could be caused by the initial startup period of a furnace, for example.

One member expressed concerns about consumers reacting to the display of instantaneous concentrations and suggested defining requirements in another manner. Another member stated that instantaneous values



indicated by the displays are not particularly useful to consumers or even experts. CPSC staff suggested requiring digital displays to only indicate a time-weighted average of CO instead of instantaneous values.

Another member then asked if anyone knew of problems associated with CSA 6.19-17 requirements for digital displays, which allows for low levels of CO to be displayed. None of the members were familiar with issues associated with this requirement.

The conversation continued with a member stating that consumers seeing a displayed value of 0 ppm when the concentration was below 30 ppm could be deceiving. CPSC staff pointed out that the standard prohibits alarms from displaying a value below 30 ppm, which includes 0 ppm.

During the meeting, the harmonization process for UL 2034 and CSA 6.19-17 was discussed and how the task group work would apply to developing the standard. A committee member stated that the intent of the work in the task group is to develop recommendations to submit to the harmonization committee for incorporation into the resulting standard from the harmonization process.

One member expressed concerns that moving toward addressing lower-level CO exposure may be an issue regarding the scope of UL 2034 because it is not addressing an immediate health hazard, but rather an indoor air quality concern.

A member proposed that COHb levels should be displayed instead of CO concentration in parts per million (ppm) so that there was a direct value that can be correlated to possible health effects. Other members disagreed with this proposal. CPSC staff suggested that requiring a time-weighted average of CO concentration may be more appropriate because the health effects of CO are primarily affected by exposure level and duration of exposure. CPSC continued by stating that several other factors impact the level of COHb in an individual's blood.

Throughout the discussion, several members stated that there are problems with the lack of understanding of CO and its health effects by consumers and that this has a big impact on the requirements for digital displays. They shared the concern that consumers do not generally have the knowledge to appropriately react to the values indicated on the digital display.

The task group took a poll and voted to continue developing the requirements for digital displays on CO alarms.

The next Task Group meeting is TBD.