

MEETING LOG

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

OP PLAN ENTRY: Carbon Monoxide (CO) Alarms

DATE OF MEETING: 1/13/2025 **LOCATION OF MEETING:** Virtual

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

FILING DATE: 1/15/2025

CPSC ATTENDEE(S): Matthew J. Brookman (LSM), Zachary Goldstein (LSM)

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

Summary of Meeting:

Matt Brookman and Zachary Goldstein participated in the UL 2034 Standards Technical Panel meeting on January 13, 2025 from 2:00 PM to 3:30 PM EST.

The committee discussed several topics related to UL 2034, which included harmonization of UL 2034 and CSA 6.19; the development of a new low level monitor standard; changes to display requirements and voice alert requirements; a requirement for 10-year batteries; and simplification of CO alarm manuals.

ULSE has initiated a harmonization project with CSA to harmonize UL 2034 and CSA 6.19 requirements. One aspect of interest by one participant was the harmonization of the display requirements between the standards. CSA currently allows for the display of lower levels of CO while UL 2034 does not allow for the display of CO concentrations below 30 ppm.

One committee member submitted a proposal to develop a new low level CO monitor standard. The participant described multiple uses for low level monitors, including residential, aviation, first responder, and marine applications. They described various potential benefits such as early alerting to improperly operating gas fired appliances or the accumulation of CO on the deck of a boat. Some participants expressed support, however, others stated that this should be covered by UL 2075. Participants discussed the applicability of this standard to portable low level CO monitors. A better definition of the types of products that are within the scope of this proposal would be needed to continue this conversation.

In addition to the proposal of a new standard, another committee member provided four proposals to address low level CO exposures. The first proposal was to change UL 2034 to require displays, allow them to show concentrations below 30 ppm, and require the displayed level to be within 3 ppm of the actual concentration. The requirement for a tolerance of 3 ppm was an initial proposal for discussion. One member expressed concerns over the sensor capabilities to achieve this level of accuracy and further stated that more information would be needed from sensor manufacturers to evaluate this requirement. At the end of the display



requirements discussion, the proposing committee member suggested breaking this consideration into two parts, beginning with determining the capability of CO sensors and then discussing the requirement for displays. The committee discussed whether this should be addressed before or after harmonizing UL 2034 with CSA 6.19. One member stated that this issue should be addressed prior to harmonizing and that the CSA requirements have been successful for many years. Other members agreed.

The proposing committee member continued to their next topic to require 10-year sealed batteries, stating that this would eliminate one of the barriers to consumers having an operable alarm by removing the need to maintain the CO alarm battery. One committee member was concerned with the requirement of a 10-year life, stating that some technologies used in CO alarms are not designed for that service life. Currently, a 10-year service life is not required by UL 2034. The committee will continue to discuss the requirement of a sealed battery for battery power supplies.

The next proposal was to require voice alerts in addition to the current requirement of a T4 CO alarm signal. The committee member expressed concern that, based on one study, consumers had difficulty differentiating the CO alarm signal from smoke alarms or even microwaves. One member was concerned that this change would be difficult, but possible.

The final proposal was to update CO alarm owner's manuals. The proposal is to improve manuals to encourage consumers to better familiarize themselves with CO alarms, including what they do and what actions the consumer should take when they alarm.

With consideration for the previous four proposals, several participants stated that the committee should not wait for UL 2034 and CSA 6.19 to harmonize and should develop task groups to evaluate the proposals immediately. CPSC staff agreed with this statement and the importance of working on these proposals. The committee is now reaching out for participants for these task groups.

Next Steps:

The next technical committee meeting is TBD.