



MEETING LOG

SUBJECT: ANSI/CSA FURNACE TECHNICAL SUBCOMMITTEE (TSC) WORKING GROUP (WG) MEETING

ON May 28, 2026, RE. RFC #23

FY 26 OP PLAN ENTRY: Gas Appliances - CO Sensors

DATE OF MEETING: 5/28/2026

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Ronald A. Jordan

FILING DATE: 7/13/2026

CPSC ATTENDEE(S):

Ronald Jordan, ESMC
Caroleene Paul, ESMC
Han Lim, ESMC

NON-CPSC ATTENDEE(S): Contact babak.owlam@csagroup.org for the full attendee list.

Summary of Meeting:

The furnace working group (WG) met to discuss Request for Change (RFC) #23 to ANSI Z21.47- ed. 9, Standard for Gas-fired central furnaces. RFC #23 is a proposed performance and safety provision that would require a carbon monoxide (CO) detection device (i.e., sensor) to be mounted on the ambient side of a gas furnace. As with each WG meeting, the WG chairman reiterated the rationale for the standard under development for carbon monoxide detection systems as being:

“Means shall be provided to shut down the furnace burner operation in the event of carbon monoxide level exceeding the upper threshold of 70 ppm for at least 10 minutes time weighted average, as measured by the carbon monoxide detection device (detection device) in the circulating air. The furnace burners shall remain shut down until the carbon monoxide level reduces below the reset threshold of 30 ppm for at least 10 minutes time weighted average, as measured by the detection device in the circulating air. During burner shutdown while there is a call for heat the air-circulating fan shall maintain airflow. If the detection device is inoperable [see action 8 for rationale] or is disabled [see action 8], the furnace burner operation shall remain shut down. If the detection device reaches the end of its specified service life, the furnace burner operation shall shutdown. Diagnostic information shall be available at the appliance.” This provision does not apply to furnaces for outdoor installation only.”

The WG Chair provided an update on the CO Sensor Validation Study. The NIST SOW is currently in legal review at AHRI and could take up to 6 months to get paperwork completed. The desired time frame to begin the validation study is November/December 2026.



CPSC staff reiterated that CPSC Laboratory Sciences is coordinating with NIST to conduct the validation study.

The WG discussed changes to Section 4.xx.1 of the proposed standard requirements that would add a clause that if the upper CO threshold is exceeded for 10 minutes or more at the start of a call for heat, the main burner shall remain shut down. The WG will use the findings from the AHRI Validation Study to establish some of the sensor performance requirements.

The WG Chair discussed the NCOAA's December 18, 2024 petition of CPSC requesting the Commission to initiate rulemaking to make the following changes to UL 2034, Standard for Safety for Single and Multiple Station Carbon Monoxide Alarms:

1. Alarms to sound when CO concentrations reach 15 ppm for 30 days or 30 ppm for 1 hour;
2. Alarms to have digital displays of CO concentrations that are accurate to ± 3 ppm, including accurate displays of CO concentrations below 30 ppm;
3. Alarm and trouble alerts using voice signals in multiple language options;
4. In battery-powered alarms, a battery or batteries designed to last the lifetime of the alarm and battery tamper-proofing features; and
5. Simplified user manual design to improve familiarity, operation, and maintenance.

The WG chair mentioned that Ontario has a 25-ppm CO threshold limit. Staff asked whether given that the Ontario limit is lower than the 30-ppm reset proposed for RFC #23. The chair responded that he did not think so, but also expressed that it might be prudent to consider changing the reset limit at 25-ppm CO.

A comment was made that most of the furnace involved in CO incidents were older models. CPSC staff replied that CPSC has also provided CO incident data involving newer furnaces with modern safety improvements.

The CO Sensor WG chair attended the furnace WG meeting and provided an update on his WG's discussions on which gases to use to conduct poisoning and cross sensitivity tests for CO sensors.

The meeting adjourned at 12:30 pm est.