



MEETING LOG

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

ON December 11, 2025, RE. RFC #23

FY 25 OP PLAN ENTRY: Gas Appliances - CO Sensors

DATE OF MEETING: 12/11/2025

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Ronald A. Jordan

FILING DATE: 12/18/2025

CPSC ATTENDEE(S):

Ronald Jordan, ESMC
Caroleene Paul, CPSC
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 chairman discussed proposed revisions being made to the draft Section T.1.5, Test for CO detection device. One of the revisions included a new provision that stated “When the CO level in the circular ductwork is



within 10 ppm of the upper CO threshold (70 ppm) the CO introduction rate shall be no greater than 1 ppm per minute. CPSC staff raised the concern that it might be difficult to maintain the CO concentration steady at 70 ppm in the circular duct if the CO injection is either cut off or reduced. To address this concern, the WG considered adding "... and stays at or above" 70 ppm to mitigate the concern.

The WG Chairman mentioned that one of the bidders on the Validation Project testing no longer had a test house available to conduct the testing outlined in Phase 1. The bidder proposed instead to eliminate Phase 1 and rely on existing CO dispersion data. CPSC staff questioned whether relying on existing data would be adequate to determine whether a CO sensor on board a furnace in the basement could detect and adequately warn consumers if a leak occurred on the second floor of the home. This concern was not resolved but will be considered as the WG addresses this issue.

The meeting adjourned at 12:00 pm est.