

CO ALARM TAG
JANUARY 20, 2015

TAG members present: Dave Kokot, TAG Chair; Gary Allsup, Nancy Bernard, Neil Hampson, M.D., Julie Johnson, Mark Murray, P.E., Joe Puckett, Rodney Schauf

A quorum was not present.

Dave Kokot explained that the purpose of reconvening the TAG is to look at the new model code language as adopted at the national level in the 2015 codes. We will identify changes from current state language to determine if we need to keep our current amendments or develop new ones. If a proposal is submitted, it will be considered, and will go through the process for public hearing, etc. for adoption in 2016. The current Washington language has worked well and is being enforced. Dave asked if anyone know of any problems.

Nancy Bernard expressed concern on whether dry wall is a sufficient barrier. Dr. Hampson has published an article showing that CO passes through drywall; NFPA is funding a study and model the data. A preliminary report verified diffusion across drywall; it is due back to NFPA shortly. Dr. Hampson noted they are trying to determine what kinds of coatings might suffice to form a barrier to stop the penetration of CO through drywall.

Rodney Schauf pointed out a problem he has encountered; many of the vendors do not interpret the language consistently. For the same space and layout vendors have proposed from 17 to 70 detectors be installed. Dave concurs this has been a problem.

Significant changes (to the IFC) excerpts re: CO issues were sent out. We will need to modify our amendments from Section 908.7 to new Section 915/Carbon Monoxide Detection. TAG members noted that the new language seems to imply that drywall forms a sufficient barrier. Dave opened discussion to TAG members.

Nancy asked about public facilities, eg, ice arenas, motor-cross, monster truck competitions and other arenas. They are not covered if considered to be an assembly occupancy (Group A). Nancy asserts those facilities should have been included in the model code.

Dr. Hampson agreed that ice arenas have had problems, including in Washington state. Nancy noted a Wenatchee motor-cross incident had occurred. Evidently we need to learn more about those type of facilities. Tim noted we do have mechanical code provisions for air quality maintenance; it should be part of the mechanical ventilation system. Further investigation is needed.

Nancy reported that several other states do cover this, but she does not believe the monitoring is required here. She will bring it up for discussion with the Mechanical TAG. She added that we originally worked off the state law, then went through the model code language and adopted our amendments.

For 2015 code changes affecting Group E requirements, we will contact OSPI to let them know about new code. Dave recommends we inform that group to participate in the next meeting on

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Monday, February 9. New provisions in the model code are not retroactive for Group E, however, cost may cause a small impact; staff will contact the group.

1103.9 changes have also been included, per a query from Rodney Schauf. There is more in depth language for fuel burning appliances and fireplaces. Mark Murray asked about exception to 915.1.4. Dave asked Dr. Hampson to comment, re: whether there will be any chance of the adjoining rooms being exposed, or other rooms could be affected, and the need for devices in adjoining rooms.

Dr. Hampson noted he would want an alarm in an adjacent room. The new language indicates an alarm is not needed if there are no communicating openings; drywall is not a means of protection. Dave notes there are two ways to do detection – 1. put alarms in all the dwelling units or around all the sources around the CO source, and, 2. in all the common areas of the building. The new language just requires them in the adjoining areas, and does not specify the common areas.

Mark noted they worked with their vendors to determine whether the alarms were needed in common areas if they were in the adjacent areas. This might make sense. Dave suggested we review the new language at our next meeting. We can post ideas, and prepare language for proposals. The TAG itself does not need to do a formal proposal, but the deadline is March 1. Anyone who wants to make a formal proposal should submit it by the deadline; check the SBCC website for forms and instructions. There is new language in the IRC, IBC as well as the IFC. What other changes are in place? IRC has incorporated new requirements related to devices.

Mark is curious about the literature for the pass through on the dry wall; design strategy is subtle negative airflow. It can be very low, differential pressure; contaminants can get out of the room. There tend to be more cracks and crevices as buildings age. Dr. Hampson sent an article to the group through the e-mail list. He has additional information on a draft and is awaiting permission to share it with the group. He added that toxicity is based on dose and length of time of exposure. There have been a number of reports in the media on cases of this nature.

Kokot asserted that clarification may be needed on some of these issues. We must determine if the new language is sufficient; there have been a number of CO ‘saves’ with the new requirements that we have in place in Washington now. When detectors are present and working, lives are saved. Dr. Hampson notes there are many states that exclude residential CO requirements where no fuel source is present; we believe we made the appropriate changes to the code, based on the law that was passed here in Washington. Many other states did not, but simply adopted the base code language. It was noted that there is a potential for portable appliances to be used, e.g. during power outages, so we don't exempt unless it is an R-2 dorm. We did a good job of addressing these concerns previously; however, it does not appear the model code is picking up on it. We will be pushing this at the national level, SBCC will be the proponent.

Nancy notes she collects news reports, however she added CO poisoning is not a 'reportable poisoning,' so it is hard to get accurate statistics. Dr. Hampson notes pool heaters are problematic in hotels. In Wa many of the heaters are electric, as it is a cheap fuel source here.

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She clarified the common problems are fuel burning appliances and items being brought in during storms. Mark is interested in seeing her articles, she will send out the hyperlinks. Dave notes we also need to illustrate 'saves' to show that our code language is effective.

Dr. Hampson does a lot of data collection, and offered that we can use all this information as justification for our code proposals. We should make the code as strong as possible, and financially within reason, i.e., affordable.

Nancy notes there are a number of new fuel burning items/appliances now available on the market, and they are exempt from code provisions and enforcement. Rodney agreed, not all appliances are covered, it is hard to accurately list each individual appliance. Since we cannot list every item, Rodney proposed we look at the big picture.

A new item of concern is the 'portable fire tables;' these run off propane, people often use them in the living room. We need to provide some protection, but we don't have control over what people do to 'enhance their environment.' What are the higher occupancies; those are the ones we could regulate.

Pool heaters are already addressed, if attached; may need to address some wording changes. Nancy remarked that CO diffusion is likely with drywall; at the edges, floor and ceiling there is leakage. Dave believes we were justified in what we did previously, given the information we had at the time; now we need to consider current studies and data and make sure the public is protected as much as possible within the purview of the codes. Nancy pointed out that other toxics are present when ventilation is not present; there are very dangerous impacts on cardiovascular health.

Nancy notes she has a conflict for the next meeting with the TAC meetings with schools. Dave asked staff to poll further dates for the next meeting. We need a face to face meeting. Staff can check dates for a meeting on the west side of the state. Nancy noted there is a DOH office in Kent. We have some members who are no longer available, we will try to fill those spots. Gordon Beck for the DOH/schools TAC may have a name recommendation for the TAG. Dave and staff will follow up.

Dave notes the intent for this meeting was to begin the discussion. All TAG members should go through language, and if changes are desired, please prepare those. We can see what needs to be added from our current amendments, we will schedule the next meeting asap.

Meeting adjourned at 11:10 a.m.