## Fire Code TAG DRAFT Meeting Minutes May 4, 2012

TAG members present: Dave Kokot, Corey Thomas, Joe Puckett, Dave Nelson, Jim Kambeitz, Diane Glenn, Lee Bailey, Hank Teran, Shawn Shepherd

TAG members absent: Lee Bailey, Margie O'Brien, Michael Montgomery, Robert Eaker

A quorum was present.

Staff present: Tim Nogler, Joanne McCaughan

Guests: Manny Muniz, Barbara McMullen, Brad Graham, Dale Rene, Tim Bartholomew

- 1. <u>Welcome and Introductions.</u> Several guests were present to speak regarding the issue of photoluminescent stair markings.
- 2. <u>Agenda</u>. The meeting agenda approved as written, with the addition of Solar PV systems added to 'other business."
- 3. <u>Minutes review</u>. Add the language as approved by consensus or as modified. Approved as amended. Approved.
- 4. <u>Carbon Monoxide Detection</u>. The CO TAG reviewed the 2012 code and developed language in three codes (IRC, IBC, IFC). Joe Puckett served on the TAG representing multi-housing interests. The TAG came to consensus on some of the issues and had a majority vote on others; the Council approved the work of the TAG and the rules developed went into effect on April 1, 2012. However, since the rulemaking process there have been some interpretation questions about what the TAG developed compared to the original CO Alarm RCW. During the 2012 legislative session, the real estate industry put forward a measure regarding the sellers' disclosure form issue.

The intent of the original CO Law was to get the alarms into the homes to prevent CO poisoning incidents; they were to be installed no later than January 1, 2013. In order to make it possible for the locals to allow for enforcement, the TAG developed language related to work requiring a permit and therefore, an inspection (see section 908.7 of the IFC and IBC, and 4603.8 for existing buildings); since the WAC and RCW do not actually match in that regard, it has caused some confusion. The legislature had the opportunity to review the proposed rules, but they did not make changes. Legislation passed during the 2012 session requires disclosure of the presence of CO alarms upon sale of a home; this law has an effective date of June 7, 2012, so alarms must be installed in single family homes upon sale before anyone may legally occupy the residence. The TAG did create good language; the WAC in place provides exemptions for certain buildings. The January 2013 date is not in the WAC but it is in the RCW; enforcement is still an issue.

Joe believes that the intent of the TAG was to not require the alarms until or unless there was work requiring a permit being done. Seattle DPD issued a CO alarm bulletin, stating there was a deadline of January 1, 2013; Joe requested an interpretation regarding liability. It is unclear what the rule is, as it did not state how many to install and where; that should be in the regulations. Dave notes for the IFC they were to be installed in accordance with the manufacturers' instructions; he added that the 2012 version of the code included the I classification, and suggested we can remove that since the TAG did not address Group I. Reading the language from the current rule he noted it came from

the model code. What if there is building that doesn't have the fuel burning appliance, and the dwelling units don't, does it say it is needed or not. Discussion continued on how the model code language was used as a base, but it created confusion; Dave added we are educating folks and following the same path as the smoke detectors, and like those it is difficult to enforce. At the CO Tag it came to a vote on the IFC and IBC amendments with only one or two dissenting. Dave suggested it might be useful to re-convene the CO TAG, to take one more look at it for IBC and IFC. This topic was TABLED until Tim Nogler is available to join the conversation by phone. (see page XX)

5. <u>Luminescent Marking</u>. Fire Code TAG met and discussed this in 2011, and in December the Council passed an emergency rule; since then we have begun to look at the language in the 2012 IFC. Manny Muniz submitted documents to the committee, but is not requesting amendment of the code. He will not present additional information, but can answer questions or clarify as needed. The language was developed by experts after examining what happened in the bombing of the World Trade Center; we should follow the lead of the ICC and not wait for tragedy to occur here; there could be liability issues if they don't provide it, at the least the high profile requirement. It would be foolish not to adopt a mandate identified by a federal agency. Dave noted there is not a question for new buildings, only for existing buildings. Manny pointed out that only part of Chapter 46 was adopted, but not means of egress. He noted it saves lives, and firefighters lives are at risk; NIST pointed out the risk along with NYC, ICC, many experts have reviewed this and collaborated to develop the language.

Dale Rene spoke next; he had provided the Canadian study as background information for the TAG. His concern is finances; it is an expense. He recognizes that no one wants to pay for things they don't need. He has worked with a dozen different ownership groups in the area, they all wanted to move forward with installation of the materials. They feel like they had to wait and now they need to may need to re-qualify for financing; that is challenging for some. Financing options may be available to those who cannot afford it initially. Some are applying the materials to their tools, as they can find them more quickly in the dark, being even more effective than flashlights which may flash backlight in smoky conditions.

Manny asked about Chapter 1101.4.2 allows the code official to grant a time exception for hardship; he urges the use of that language on a case by case basis.

Tim Bartholomew with Glow Technologies, Inc. spoke next; he has been working for six years in this industry, and has walked more than 150 buildings in the Puget Sound area, based on the original passage of the code. He is tired of spending time and energy on something that is not going to happen; they have educated building owners. He wants to know where things are in terms of rulemaking at this point.

Brad Graham, it sounds like the study has been provided, but he brought a copy; it has detailed information; he covers seven states, and sees an influx of products coming in; stair companies are already putting in the materials; there are some buildings in Seattle that are incorporating the products in. He wants to approach and educate them.

Corey asked about the materials, and whether owners can purchase/install on their own. Some materials lend themselves to that; but every situation has different challenges, depending on the construction and the product. However, the businesses provide installation guarantees; there are warranty issues that would be lost on self-installation. Their bid proposals list labor and materials costs separately. They work with the needs of the client to insure correct installation.

Joe requested clarification on whether this issue affects his apartment interests. It does not.

Dave noted we revised 4604.1 and then modified that further to remove the requirement for existing buildings. Shawn is confused. Dave explained that the 2012 code language was where we were trying to go with our amendment; Shawn noted there is a current mistake/errata. Manny confirmed with ICC that the errata correction will be issued with the second printed, and it will be through 1104.24. Dave explained our current amendment allowed for the exception for existing buildings, and we can make the proposed change in the 2012 code. We could go back to 1104.23 and continue to exempt the existing buildings. As the Chair of the TAG it is his intent to ask the TAG whether they want recommend to the Council to continue that exemption or to go with the 2012 language (as corrected).

Dale Rene mentioned that they specialize in ADA codes and provisions for the sight challenged. All new existing buildings were to be covered and there was a lot of pushback; the building officials were also concerned. They had to do spot inspections; they imposed substantial fines for non-compliance and soon the rest of the industry began to comply. It is understood there are issues of understaffing, and it is a challenge, and they can control and enforce with fines. He mentioned the nose over profile, some are very thick, some are a trip hazard; it was suggested they could do the corners; that is less costly, and a viable option. Another option is a strip that can be applied, it's more comfortable, mid-level expense. There is a problem depending on the type of step that is installed. Lee wanted to know if they could do the corners in the way the code is currently written. There would need to be different language. There are many products available, there is a question of length of warranty, the cost goes up with the length of the warranty; 10 years is the maximum, but they can expect the product to last longer than that. The cost is amortized.

Diane noted the TAG is responsible for cost analysis. Manny noted in the Canadian study, the use of the type of marking would preclude the need for emergency lighting; that was suggested by Boma, but ICC rejected it. Joe asked what the purpose of today's meetings are, is it a public hearing. Dave clarified it is not, but there will be two later on this year where more testimony can be provided.

Hank Teran asked about the difference between certain California provisions for 'existing' buildings, while in Washington it is everything that it is in place. Manny agreed that is correct. Food for thought, the 1104.1.2 and .3 gives a lot of flexibility to the code official. Many existing buildings are non-sprinklered; Manny clarified that he did not submit a proposal as he was directed by staff he would not need to since he wanted to have the Council adopt the model code language. Hank wanted to know if there was something he was missing. Diane asked how we can proceed to make a change to the code; she is not in favor of deleting the amendment, but believes we may need to modify the current language. Dave read 1104.24 as noted in the 2012 IFC. The exemption of historic buildings is still in place

Corey noted there are different options for achieving the requirements; there are some specific things required. The corners for steps do not comply, but NY state did allow for those. Lee asked if other than anecdotal, is there any evidence that the building is safer. Dave indicated it is. Dale Rene noted there are battery operated emergency lights required; when smoke fills the stairwell, there is glow back on smoke, but the illuminated marking systems can allow people to still see the steps. Diane wants to keep the lights in place. Shawn asked if there is there a durability issue with paint. Dale Rene responded that is a problem, there is a wide range of pricing, with even some saying how much they charge per floor. He needs to do the walk through to determine the best product for that particular building. Tim noted there are durability issues on some of the lesser expensive products; there are higher end products that are more durable; some warrant the glow for 25 years.

Shawn points out that if the power is off, the PLM product wont' be charged. Some of those in his jurisdictions are down to 25 watt bulbs. Tim has not found that to be a problem in all the buildings he's

looked at. Rene noted that even minimal lighting is helpful, it is analyzed and the information is charted for this situation, but there has to be some minimal charge. It has to meet the UL 1994. Joe brought up the fact that some building owners trying to save energy may keep the lights off. Dave notes there is a current requirement for interior stairway lighting, they must be on all the time. Shawn asked about house lighting as being different. Dave N. noted there would need to be a provision for charging, the system would need to be charged and lights would need to be installed. Hank noted that the annual inspection would cover that. Diane asked if it would be continuous, and Hank noted that is usually the case unless they are on a timer.

Dave pointed out that he has not heard any motions. Hank added there has been a lot of work done before it even got into the code; the current language in the 2012 code provides the flexibility to work with the Fire Official. Shawn asked if there was an inventory of existing buildings, and it was acknowledged that has not been done. The Seattle rep was on the phone, but did not want to take a position.

Dave pointed out that the Council is required to take public safety into account. Shawn would support the model language. Diane has some concerns about cost and implementation dates; Dave pointed out that locals have flexibility and they are doing it as they can get educated in the issues and processes. Diane won't hold it back. Dave proposes to the TAG

Tim has been down this road before, the dates have been changing among the jurisdictions, and they don't want a specific date because it would be impossible to finish the work. Rene notes industry has been doing a lot of education among the locals, they are ready to go, locals are ready to go, very little negative feedback from building owners; Tim sent a lot of info to Spokane, there may be up to 14 buildings in that area. Rene noted this is about saving lives.

Dave asked if there is consensus to follow the 2012 model code, with the renewal of the emergency rule up until the date of implementation of the 2012 code. He clarified that we had earlier amended the 2009 model code language, then we added the emergency rule on PLM. There are exemptions to that chapter, the PLM requirements are only one part of it. The other option is to take the emergency rule and change it to include the PLM for existing buildings.

He added there were concerns presented previously from opponents and building owners who had cost issues; it involved discussion of the reason for the exemption, and the fact that there is the life safety analysis. He believes there is a need to retain that language for the future, adding the new language in Chapter 11 would be in conflict with the building code.

Joe is concerned that we not talk about the 2009 deletion of the code. Shawn is not happy with certain language in the evaluation section in 2012.

## (Dave declared a break)

4604.1 1104.1 General. Means of egress in existing buildings shall comply with Section 1030 and 4604.2 1104. 2 through 4604.23. 1104.24.

EXCEPTION: Means of egress conforming to the requirements of the building code under which they were constructed and Section 1030 shall not be required to comply with 1104.2 4604.2 through 1104.22 4604.21.

CO Alarms: we are looking at the IFC/IBC; does the date in the RCW apply to everything, or are the exceptions exempt from the January 1, 2012 date for installation. There is some misunderstanding

among the members of the group; we may need to revisit the wording. In the IRC the locations are clear, but that is not within the commercial building requirements. We had focused more on the manufacturers instructions. Ask Tim how the RCW relates to the WAC; Tim notes for the fire code for new/existing, but it would relate to the Building Code. The deadline in the statute for new buildings; the deadline does not apply when the exceptions apply. The enforcement community is concerned about inspections, the discussion was that we will do it when we get a permit; the date of January 1, 2013 will still prevail. Need to move forward under the 2012 code and decide how to modify the language. On the IRC TAG they are looking at the question around monitored systems, this is new language in 2012; we may address that issue. Dave asked if the CO TAG should be the body to make the recommendation; Tim notes that the committee can decide where the discussion should happen; we know where the issues and limitations are: enforcement provisions, and health and safety exceptions for existing multi-family apartments. Dave notes the CO TAG was well versed, he is leaning towards that approach. Shawn agrees it should go back to the CO TAG. Joe told Tim that he met with Duane, and he agreed to request a formal opinion about the R-2 buildings by January 1, 2013. He believed they were exempted unitl they get a permit. Tim understands that was the intent of the TAG, but the question is whether the Council was authorized to provide that particular deadline. The interp would be based on the WAC, the second issue would be the staff Attorney's advice that the RCW would prevail. Joe can live with that, but he would have written that as an exception like they did for the dormitories. There would have been some information in the file to indicate that it was based on life/health/safety. Table the issue for now. Dave asked for a motion from the group. Dave asked for clarification on the deadline for submission of language, for June 1; the section numbering needs to be based on 2012 language. We need that in any case. The deadline for the final wording must be filed by August 1, our last Council meeting is July 13. Tim suggested we could invite the CO TAG to a BFP committee meeting in June, and Dave asked if we could make a motion to send the issue to the BFP for their meeting in June. That should still allow us to be finished by the deadline. Dave notes that the CO TAG has a stong interest in the outcome; there was a lot of data provided by the proponents. Section 1103.9 will need to be addressed. Motion carries.

The photoluminescent issue was brought back for consideration of language sent by Tim:

**1104.1 General.** Means of egress in existing buildings shall comply with Section 1030 and 1104.2 through 1104.24.

**EXCEPTION:** Means of egress conforming to the requirements of the building code under which they were constructed and Section 1030 shall not be required to comply with 1104.2 through 1104.22.

<u>1104.1.1</u> Evaluation. Existing buildings that were not required to comply with a building code at the time of construction, and that constitute a distinct hazard to life as determined by the fire official, shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Sections 1104.2 through 1104.24. The fire official shall notify the building owner in writing of the distinct hazard and, in addition shall have the authority to require a life safety evaluation be prepared, consistent with the requirements of Section <u>104.7.2</u>. The life safety evaluation shall identify any changes to the means of egress that are necessary to provide safe egress to occupants and shall be subject to review and approval by the fire and building code officials. The building shall be modified to comply with the recommendations set forth in the approved evaluation.

The markings would be required; other elements could be required by the fire official. Joe thinks that there is an element of concern in that it would only apply to buildings built before 1890. However, it was explained that there were no building codes for much of the  $20^{th}$  century; Dave N. stated the local Fire Marshal can call for a survey on a distinct hazard; for situations that are grossly unsafe they need to be able to evaluate. Joe wants to develop language; Hank asked how long it has been in effect, and whether there have there been any problems. Tim specified that it has been since 2009, and no problems

were known of. It is important to simplify what the model code was saying. Diane pointed out it is just to allow the fire official to order the life safety evaluation. Dave noted that the issue of it being a distinct hazard was what was in question. The option is still in place in technical assistance area in Chapter 1 (107). One option would be to eliminate 1104.1.1 – Shawn asked for clarification on to why that paragraph needs to be included. Hank doesn't think it is needed; it should not just be up to the person in the field. If the intent is for existing buildings to meet the code, this paragraph is unnecessary. Diane noted that the language in chapter one only speaks to analyzing the regulations, there is no follow up required. The report is one thing, but the ability of the fire official to order repairs is in 110; they can deem it unsafe and order it to be addressed. Dave noted it does not need to be in every chapter. Joe thinks we need 1104.1.1, but Dave noted it is a duplicate code. Dave N. wants to remove the evaluation language in 1104.1.1 since it is already covered in the administrative section. Dave would not expect to have anyone at the public hearings argue in favor of keeping that language. The TAG reached consensus to accept the modification to 1104.1 and eliminate 1104.1.1 as follows:

4604.1 1104.1 General. Means of egress in existing buildings shall comply with Section 1030 and 4604.2 1104. 2 through 4604.23. 1104.24.

**EXCEPTION:** Means of egress conforming to the requirements of the building code under which they were constructed and Section 1030 shall not be required to comply with 1104.2 4604.2 through 1104.22 4604.21.

- 6. New chapters 11 and 23 Bob Eaker reported that there are no concerns identified by his review.
- 7. Portable classroom requirements. Dave had additional information from Tim; we should have the 5000 sq. ft. divided by the number of classrooms. Shawn asked for clarification. The sq. ft is the limit, anything over 5000 square feet in a cluster must be sprinklered. Dave noted the occupant load is not a good way to go. Is there any language to modify this proposal? Tim N. a classroom occupant load is 20 sq. ft. per occupant, at 5000 sq. ft it would be 200 occupants. This was in place since 1993, as a square foot issue, not related to the occupant load. Is there a need to identify an occupant load; Dave states there is a need to have language for occupant load; as if there is a class with more than 50 it would require sprinklers.

Shawn asked if this was to get closer to model language. Under the Uniform Code, Group E Division 2, the occupant load of 50 was the threshold between Division 1 and 2; Shawn explained how that uniform code language worked, we have to deal with the exceptions. Not sure how to resolve exception 1, but for 2 could add language on day care; or else it could force sprinklers for small day home cares. Dave noted there could be a licensing requirement but not a code requirement. Barbara M. explained the sprinkler requirement is for more than 1750 sq. feet, with more than 50 occupant load. Shawn sees it as two separate and independent questions, others see it as one. If it is an E occupancy with more than 50 it must be sprinklered. If it is brick and mortar and more than 50 occupants, it must have sprinklers, but if it comes in on wheels and is in a cluster, that is not required until 250 occupants are present. Dave thought the cluster was a problem, but Tim explained if it was a multiple portable structure; citing the statute from 1991, it exempts portable school classrooms that were E-1 back in the 90s; the RCW said it did not need to have sprinklers in portable classrooms. Tim thinks we are stuck with this unless there is an amendment to the RCW; our legislative committee could put forward a proposed amendment given changes in technology.

Barbara M. suggested changing to 'regardless of occupant load." But Dave N. replied that the fire community really 'doesn't want to go there'. The school districts are dependent on these and it allows them to get excess space when they have shortages. Shawn would prefer an occupant load for both conditions. Barb noted they had a portable administrative building come in that was larger, and it had a sprinkler system. Shawn asked whether buildings coming in from other states must meet the Washington code. It is handled by L&I. Jim states if we need to clean up the issue we could say "an occupant load in

accordance with Table 1004.1.2, provided aggregate area of classrooms or clusters of classrooms do not exceed 5000 sq. ft......" consensus was reached. Tim noted the definition of cluster is defined within the context of the exception; it is defined within the exception as the group of portables. Lee asked if the fact that these are joined together with a huge amount of kindling creates a problem. The answer is no.

- 8. Type-one hoods. There has not been a review by the Mechanical TAG yet. They will review this later this month; the Fire Code TAG will follow their lead on this issue.
- 9. Section 906.1 This deals with fire extinguishers being stolen; Consensus to delete current amendment.
- 10. 3405.4.1 –Solvent distillation units Consensus to delete current amendment and comply with new model code language.

## 11. Other Business:

- a) Follow up discussion regarding proposal 11-025 for Sprinkler Requirements in Group E, i.e., issue of childcare in school buildings; we will not accept the proposal at this time. TAG members are welcome to submit information to the WSFM for their consideration as they update their WACs pertaining to these issues.
- b) On the PV issue, Shawn has looked at this again. He is concerned that the issue would not be able to get a permanent rule in place until late 2013 or mid-2014; he wants to have the special TAG meet sooner rather than later; he doesn't want to put this off. Dave asked Tim if it could be done as an emergency rule if they did not get there by the deadline for this year, since it is a firefighter safety issue. Tim indicated if it is within the July 1, 2012 deadline it could become part of the permanent rules and be effective in 2013. Local jurisdictions have the option to adopt more restrictive sections. The special TAG will provide the language, then get an emergency rule. We still will not have any say over the IRC, but they are also going to be at the table. Consensus to not adopt the 2012 language in IFC 605.11 at this time; the TAG will be a cross code TAG; SBCC staff will set up the TAG.
- c) IBC issue, Diane will provide clarification via e-mail to follow up; re combustible weather barriers definition. She would refer that back to the building code TAG and will contact staff to clarify.
- d) Shawn looking for coordination/document on new referenced standards. He will prepare wording for consideration at the 5/23/12 meeting.
- e) Matrix: 906.1 Fire extinguishers exemption on R2 occupancies. Consensus to delete this amendment.
- f) Shawn has been trying to connect with Labor and Industries they are going to move forward on new rulemaking on elevator requirements; he indicated that 'the little red box' requirement has disappeared; L&I states it depends on the inspector. They will be adopting new WAC language, but their technical advisory groups don't include fire service. We may need to keep our current language; they only have an advisory group and it does not include fire service. Their stated policy is that fire service is to never enter the hoistway, when there is a problem, they recommend calling in a service company.
- 12. Next meeting will be a conference call on 5/23; this will be the final meeting to resolve any issues still outstanding.
- 13. Meeting adjourned at 3 p.m.