



**DEPARTMENT OF FORESTRY & FIRE PROTECTION**  
**OFFICE OF THE STATE FIRE MARSHAL**  
**Flammability Standards for Building Insulation Materials**  
**(AB 127) Working Group Meeting Minutes**  
**January 29, 2014**  
**Office of the State Fire Marshal Headquarters**  
**1131 S Street, Sacramento, CA 95811**



**MEMBERS PRESENT:**

Kevin Reinertson, Division Chief- Office of the State Fire Marshal (SFM) Code Development & Analysis Division

Eric Banks, Technical Specialist- BASF Corporation, representing the Spray Foam Coalition of the Center for the Polyurethanes Industry (CPI)

Jesse Beitel, Sr. Scientist / Principal- Hughes Associates, representing the American Chemistry Council (ACC)

Tonya Blood, Chief- Department of Consumer Affairs, Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (BEARHFTI)

Gordon Damant, Flammability Expert & Consultant- Damant & Associates

Michael D. Fischer, Director of Codes & Regulatory Affairs- Kellen Company, representing the Polyisocyanurate Insulation Manufacturers Association (PIMA)

Steve Fischer, Ph.D. Chemist- Department of Consumer Affairs, Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (BEARHFTI)

Gene Gantt, Interim Executive Director- California State Firefighters Association

Andrew Henning, Deputy State Fire Marshal- SFM Code Development & Analysis Division

Dr. Marcelo M. Hirschler, President & Technical Director- GBH International, representing the American Chemistry Council's North American Flame Retardant Alliance (NAFRA)

Howard Hopper, Regulatory Services Program Manager- Underwriters Laboratories (UL)

Avery Lindeman, Science & Policy Associate- Green Science Policy Institute

Donald Lucas, PH.D., Motion Scientist- Environmental Energy Technologies Division- Lawrence Berkeley National Laboratory

Justin Malan, Principal/Owner- ECO Consult, representing the U.S. Green Building Council of California

Jim McGowan, Executive Director- California Building Standards Commission

Robert Raymer, P.E., Senior Engineer /Technical Director- California Building Industry Association (CBIA)

Walter Reiter, Deputy Director- Expanded Polystyrene (EPS) Industry Alliance

Lorraine A. Ross, President- Intech Consulting Inc., representing the Extruded Polystyrene Insulation Manufacturers Association (XPSA)

Tim Shestek, Director of State & Local Public Affairs- American Chemistry Council

Adria Smith, Deputy Fire Marshal- Fountain Valley Fire Department, representing Cal Chiefs / SoCal Fire Prevention Officers Association

Paul Wermer, Principal- Paul Wermer Sustainability Consulting, representing the U.S. Green Building Council of California

Kevin White, CPAT Director- California Professional Firefighters

Mike Wilson, Ph.D., M.P.H., Chief Scientist- Office of the Director, California Department of Industrial Relations, representing California Labor & Workforce Development Agency (LWDA)

## **MEMBERS ON THE TELEPHONE:**

George Combs- Bayer Material Science LLC  
Barb Fabian- Owens Corning  
John Ferraro- Extruded Polystyrene Foam Association (XPSA)  
Jerry Phelan- Bayer Material Science  
Greg Pruden, Department of Consumer Affairs  
Steve Risotto, Senior Director- American Chemistry Council  
Jeff Sickenger- KP Public Affairs, representing the American Chemistry Council (ACC)  
Joel Tenney, Director of Advocacy- ICI-IP America Inc., representing Israeli Chemicals  
Don Wheat- ?  
John Woestman- Extruded Polystyrene Foam Association  
Carrie Cathalifaud - Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (BEARHFTI)  
James Carver – Fire Marshal, City of El Segundo, representing CalChiefs, Southern California Fire Prevention Officers

## **I. CALL TO ORDER**

- A. **Welcome:** Chief Kevin Reinertson called the meeting to order at 1000 hours and explained that this is a kickoff meeting to start the implementation of Assembly Bill 127 (AB 127), a bill authored by Assemblywoman Nancy Skinner in 2013 that requires the State Fire Marshal (SFM), in consultation with the Bureau of Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation (BEARHFTI), to review the flammability standards for building insulation materials in building construction and, if deemed appropriate, to propose new insulation flammability standards to be considered by the California Building Standards Commission.
- B. **Self-Introductions:** All members present and on the telephone introduced themselves.
- C. **Ground Rules:** Tonya Hoover, State Fire Marshal- Cal Fire, Office of the State Fire Marshal
1. SFM prides itself in being collaborative and transparent. SFM has completed work on many important fire and panic safety issues that has resulted in rules that are followed in the state of California. SFM employees are respectful of each other's positions and differences; Chief Hoover would like this working group to carry that tradition forward. Each member should read the bill carefully as it was chaptered and understand Assemblywoman Skinner's intent so as to help the working group remain within the appropriate box to complete the task at hand.
  2. Chief Reinertson has been given a very short timeline to complete this project; only four months, perhaps a tiny bit longer, to gather all of the information that the working group members will be sharing, go through the appropriate review using BEARHFTI scientists' expertise and put it all together in an appropriate packet as necessary. Chief Hoover would like each member to please participate fully in the process and comment whenever possible on the information presented so as to remain engaged and keep the process moving forward.

## **II. GOALS FOR MEETING**

- A. **Working Group Timeline:** Chief Reinertson has scheduled monthly meetings to be held at the SFM HQ's located in Sacramento during the next several months, however, the GoTo Meeting and conference call options are also available if necessary (see Item III B for specific dates). The California

Building Standards Commission's next rulemaking cycle typically begins in January which leaves SFM several months at the end of this year / after the working group has convened to create a report that reflects the group's recommendations, whether they be to develop guidelines, create proposals to change the codes or voluntary. Bob Raymer (CBIA) pointed out that if SFM pursues a code change, it would be for the next triennial update which would take effect in January, 2017. Chief Reinertson affirmed Bob's point and added that if SFM is going to propose regulations to the Building Standards Commission, AB 127 requires that SFM must submit the proposal by July 1, 2015.

- B. Brief Overview of AB 127:** AB 127 was written so that SFM could develop recommendations to give to Chief Hoover and, if deemed necessary, to move forward with regulations. AB 127 is an act to add Section 13108.1 to the Health & Safety Code and would require SFM, in consultation with BEARHFTI, to review the flammability standards for building insulation materials, including whether the flammability standards for some insulation materials can only be met with the addition of chemical flame retardants. The bill would require SFM, if deemed appropriate based on this review, to, by 7/1/15, propose for consideration by the Building Standards Commission, to be adopted at the sole discretion of the Commission, updated insulation flammability standards that accomplish both of the following: A.) Maintain overall building fire safety. B.) Ensure that there is adequate protection from fires that travel between walls and into confined areas, including crawl spaces and attics that contain occupants of the building and/or firefighters who may be in the building during a fire.
- C. Legislative Intent of AB 127:** Chief Reinertson discussed the legislative intent of Assembly Bill No. 127 as it was published on page 102 of the September 12, 2013 edition of the Assembly Daily Journal, one of the handouts distributed to the working group members. The intent of the bill is not to generate new data or research but rather to rely on existing information related to building materials. SFM was not funded to create new information that would include testing, data gathering, research, etc. An example of a similar working group that SFM recently convened is the Smoke Alarm Task Force which examined different smoke alarm technologies. One of the key concentrations of that Task Force was to focus on meaningful data only. Chief Hoover explained the difference between "measurable" and "meaningful" data as being that anything in this world can be measured but not everything that's measured is meaningful. Meaningful data helps achieve an end goal; this working group should focus on examining only meaningful data that's pertinent to the subject matter at hand as it relates to this piece of legislation.
- D. Establish Framework to Meet the Intent of AB 127:** The working group will use the STEEP process in completing the task at hand. The STEEP process is comprised of the following five factors: Social, Technological, Economical, Environmental and Political.
- 1. Energy Commission Participation?:** Bob Raymer (CBIA) pointed out that the California Energy Commission (CEC) does not currently have representation in the working group and that perhaps they should, especially as the group comes closer to a resolution. CEC updates the regulations on a regular basis and they're trying to reach an arduous goal of achieving zero net energy for new homes by 2020. CBIA has had initial discussions with CEC staff members regarding the next update that will be effective in January, 2017, and clearly an increase in insulation levels for most of the state is going to occur. Deeper cavities are going to be used thus more insulation material will be required. An increase in the use of spray foam insulation, a relatively new product given past history, will occur. Wall construction requirements are going to change to 2" x 6" or 2" x 8" panels or staggered between both 2" x 6" and 2" x 8" panels thus there's going to be a huge increase in insulation usage. The CEC's stakeholder meetings are going to start next month and they should be included in any proposals / recommendations made by this working group.
  - 2. U.S. Green Building Council's Intent:** Justin Malan made the point that the U.S. Green Building Council (USGBC) sponsored AB 127 and their intent was not to disrupt or destroy an industry that

they themselves rely upon. The USGBC members spec and use the foam insulation themselves and have been advocating for the foam for many years; it's the only method by which they can meet some of the high-energy efficiency requirements. However, there have been many problems and unintended consequences resulting from the past twenty-four years of asbestos use that need to be addressed. The USGBC worked closely on Bill AB 127 with Assemblywoman Skinner and because of severe budget constraints and the recognition that there probably would not be much funding, if any, available for this task, they wrote in this proviso that only existing data be utilized. Given that fact, Mr. Malan requested that the working group not put too fine a filter on the data that's submitted for consideration because that would be a trade-off. There is a lot of data out there from the scientific community, not all of which is peer-reviewed, and he urged the group not to omit any of the data that could be useful in completing the task at hand.

**E. Establish Plan for Formal Review:** Chief Hoover pointed out that Mr. Malan's above-mentioned comments can be classified as part of the social factor of the STEEP process. In order to meet the timeline, the working group may break up into smaller groups comprised of a mixture of representation to discuss and analyze the different issues that make up each of the five STEEP factors.

**1. Defining the Phases:** Chief Reinertson outlined the phases that he would like the work group to follow.

**a) Analysis**

- i. Analysis of the actual problem.
- ii. Analysis of existing codes and standards.
- iii. Analysis of code intent and history.
- iv. Analysis of any current alternatives, if they exist (not creating alternatives).

**b) Observations of the Analysis Output**

- i. Utilize the STEEP model to determine the actual observations and what will or will not remain on the table.

**c) Recommendations to the State Fire Marshal**

- i. Recommendations for change in regulation.
- ii. Recommendations for change in the utilization of a certain standard, not the standard itself.
- iii. Recommendations to create guidelines.
- iv. Recommendations to create an information bulletin(s).
- v. Recommendations to perform training.

**F. Create Working Group:** Chief Reinertson explained that he would like to create an equal balance within the smaller work groups between the USGBC, the chemical, fire, and building groups and the individuals who are not currently present but who will need to be represented such as the CEC and the Department of Housing and Community Development. Mike Fischer asked Chief Reinertson if he's going to try to achieve any milestones or progress and if he's planning on completing a literature search and review of public information. Additional meetings via GoTo Meeting and conference calls can be scheduled if necessary. The working group will need to complete a literature review of the already existing available data during the second meeting and then start formulating some recommendations and working on the actual report by the third meeting. Proposals have been submitted to National Model Codes; there were some proposals submitted to the International Residential Code for the 2015 edition. If any other proposals have been submitted to NFPA or other National Codes, then they and their justifications, rationales and testimonies can all be included as part of this work. AB 127 was not introduced to specifically address insulation standards in only one certain type of building; it's very broad and deals with insulation materials for dwellings, multi-family dwellings, commercial buildings

and high-rise structures. All of these types of buildings need to be taken into account because some are going to have larger hurdles than others to address primarily because of the volume of the building.

### 1. Define the Work Group

There are several sides to this issue: a fire science side, an industry side, a green / sustainable side, a building industry side and a financial side. The work group should be as balanced and well-represented as possible without precluding anyone from participating. Chief Reinertson polled the group and all members present indicated that they would like to participate in the work group.

## III. NEXT STEPS

- A. **Group Communication:** Lorraine Ross (XPSA) pointed out that the bill is not aimed solely at foam insulation; it examines all insulations that are used within California building standards which include cellulose, fiberglass, reflectives and a whole host of other materials beyond foam.

Dr. Hirschler stated that NAFRA members believe that the fire safety insulation currently used within the building environment, when the building complies with the code, is adequate and has prevented and minimized the effects of fires, saving lives and protecting property. NAFRA is committed to fire safety and therefore its members believe that it's essential that any type of insulation used in a building environment should undergo a fire test. They also believe that insulation should be subjected to a fire test irrespective of whether it's protected by an ignition or thermal barrier because such barriers are usually not built of combustible materials. NAFRA members look forward to working with SFM on the task at hand and are happy to participate in any working groups.

Mike Wilson (LWDA) asked Chief Reinertson what SFM is contemplating as the range of actions that may be taken in response to the language of the bill and the input of the group and to what extent the work groups' input will influence SFM's actual final work product. Chief Reinertson explained that SFM can use several avenues to make change if warranted, such as best practices produced in a report or a guideline, information bulletins or actual regulatory change (changing the building standards themselves). SFM does not have statutory authority to change the insulation requirements; only BEARHFTI can do that. SFM can change the flame and smoke spread ratings / requirements for building products and insulation specifically based upon justifications. SFM can provide alternatives if they are equal. Lessening fire and panic safety is not a path that SFM can go down; history demonstrates that certain standards for fire and panic safety are necessary. The national and state standards have ratings and requirements; there are alternatives, but what are they? The working group may recommend alternatives or it may recommend that SFM is not the appropriate office to address this issue but rather another office should handle it. SFM also works with partners such as manufacturers, USBGC and other stakeholder partners to vet information out.

Chief Reinertson explained that past task forces / working groups' recommendations have carried a lot of weight with SFM and that this work group's recommendation report is more than likely going to be the guiding tool that Chief Hoover will use in her decision making process. All recommendations from past task forces / working groups do not always move forward for various reasons such as limited resources / economics, materials unavailable at the time. Sometimes the recommendations that come out of these reports may not be directed specifically at SFM to make change but rather for SFM to reach out to another agency to make change.

Lorraine Ross (XPSA) asked Chief Reinertson how the collaboration with BEARHFTI works and also what happens after the proposals are made to the CBSC. Chief Blood explained that BEARHFTI has workshops scheduled for June because they're planning on updating their regulations and incorporating

specific forms, specifying tests for materials, removing the exemption from local building codes and allowing BEARHFTI to certify those products that are new on the marketplace in consultation with the CEC. BEARHFTI is going to be waiting for the work group's recommendations before they can move forward with their regulations because they will need to determine what relative changes they will need to make. BEARHFTI's role is to certify, license and regulate; they handle the enforcement aspect. BEARHFTI does not develop test requirements; they use industry-accepted tests and they will work in consultation with the CEC on related tests that they approve. BEARHFTI will step back from pursuing regulations or change until after the work group's report is generated.

Mike Fischer (PIMA) asked whether or not AB 127 requires that any proposed code changes to amend the CA Title 24 building standards should be submitted only by SFM. Chief Reinertson replied that if this work group recommends regulation change / changes to building standards, then there are several ways to make such changes. Voluntary methods of change that affect different buildings, or all buildings, could fall under the BSC's or HCD's jurisdiction as voluntary or as meeting certain standards for green buildings. A recommendation could be for SFM to work with those other agencies.

Jim McGowan (CBSC) explained that every State agency that proposes building standards must have statutory authority to develop building standards; some have authority to adopt building standards and CBSC approves the adoption process whereas others have authority only to propose standards to CBSC who can then adopt the standards on the submitting agency's behalf. Certain divisions within the Department of Consumer Affairs (DCA) have the ability to develop building standards and submit them to CBSC; those divisions are listed in the front of Title 24. Jim does not know whether or not BEARHFTI has the authority to develop building standards but there are certain divisions or branches within DCS that do have authority. Regarding the voluntary standards that Chief Reinertson discussed, he was referring to the California Green Building Code (Cal Green) which has tiers that are voluntary but may be picked up as mandatory at the local level. The local agencies do have a tendency to pick certain items out of Cal Green standards that are germane to their climatic, geographic or topographic needs as specified in the statute.

Chief Reinertson instructed the group that there are several portions of this bill that the work group needs to address and the questions that the work group is going to address should be focused on those portions. Health and Safety Code Section 13108.1 concerns flammability standards for some installation materials that can only be met with the addition of chemical flame retardants. The other portions should be proposed to the BSC and they will be the ultimate adopting authority. What are the questions that the working group is going to be looking at?

Jesse Beitel (ACC) would like to discuss the history of where the flammability requirements came from and how they showed up in the codes beginning in the 1970's when the foam plastics industry had to first address the issue of flammability. The same issues have arisen with cellulosic insulation which has changed over time. We need to understand how we got to where we are; the history exists regarding why certain tests are required and why certain materials need to be addressed individually and as an assembly depending on the circumstances.

Howard thinks that perhaps this group could immediately start the documentation process / create a draft document, capture snippets of everyone's ideas / opinions and spend more time massaging the document so that consensus can be better achieved.

Chief Reinertson expects the work group to actually be working on a draft document like that which Howard discussed either for the first meeting or in between now and the first meeting depending on how the work group proceeds.

Justin Malan (USGBC) stated that one question that needs to be asked is “What is the impact of the building exterior finishes?” If there are adjacent buildings and heat transfers from one building to another, what does the exterior finish do and what role does it play?

Dr. Hirschler (NAFRA) stated that exterior finishes are addressed in a different section of the code- CH. 14 of the CBC. The discussion surrounds building interiors and when there’s no thermal barrier anywhere between the insulation and the exterior; generally there’s just siding which could be plastic, biopolypropylene, wood or aluminum or some other material.

Chief Reinertson stated that 80% of CA lies within Wildland Urban Interface (WUI) areas which are high fire hazard severity zones, but only 11 – 15% of construction is done within those areas. Is exterior ignition an issue that the work group should even address?

Dr. Hirschler (NAFRA) indicated that he would like to discuss the exterior ignition issue because that’s an area of concern that needs to be addressed. He submitted proposals to change this code section in the CBC during the last cycle.

It was determined that this may be an issue for other reasons but not to be addressed at this time.

Lorraine Ross (XPSA) mentioned that there are references, even in the insulation sections of the IBC and the IRC, that refer to insulation used in the mechanical codes, etc. So, what codes are really impacted that need to be looked at here. Where is insulation regulated? Pipe insulation and pipes that are in plenums is regulated by the Mechanical Code, not the CBC. She would like clarification in regards to which codes this work group should discuss.

Chief Reinertson stated that the law is very broad and not specific to anything so the work group needs to decide: 1) What insulation materials are specifically going to be addressed. 2) What occupancies are going to be addressed. For example, regarding foam insulation board, are we referring to insulation that’s in the wall cavities or are we referring to insulation that’s behind foam? A lot of commercial structures, including high-rise buildings, utilize this type of foam. The law addresses safety for the building occupants; foam insulation on the exterior of the building, such as that on the façade of Pep Boys and Auto Zone buildings- what do we need to target?

Dr. Hirschler (NAFRA) mentioned that the law talks about travel between walls and into confined areas, including floor spaces and attics, which covers more than just cavity wall insulation. Should the group discuss both cavity wall insulation and insulation covering concealed spaces in uninhabited areas? Dr. Hirschler’s impression is that the group is not going to address the insulation behind siding.

Walter Reiter (EPS Industry Alliance) stated that with continuous insulation requirements, those types of applications are going to be seen more often. He thinks that paragraph (b) of Section 2 in AB 127, which is directed to the occupants of the building and any firefighters who may be in the building during a fire, will cause an unusual limitation on the work group’s investigation. The philosophical approach to what the work group would like to accomplish with the regulations includes deciding whether the issue is material-based or assembly-based or a combination of the two.

## **LUNCH BREAK 11:30 – 12:45**

**III A. Group Communication Continued:** Chief Reinertson advised the group that he would like to accomplish the following three items during the remainder of the meeting:

1. Define the work group.

2. Define the phases.
3. Create the questions for the work group to address.

Mike Fischer (PIMA) mentioned that there are representatives serving on the work group from the extruded polystyrene, expanded polystyrene and polyisocyanurate insulation industries and others representing spray foam interests and although everyone respects each other, everyone faces different performance issues and has different problems to solve. Industry should not be portrayed in one light only; it's quite multi-faceted and includes many others who are not present at the meeting and/or serving on the work group.

A member asked if there will be additional opportunities for other parties outside of the work group to submit written comments to SFM.

Chief Reinertson responded that if a member is aware of someone who needs to be at the table, then he/she should either contact Chief Reinertson and give him their information so that he can invite them to join the work group or bring them to a meeting but work with the work group to decide if Chief Reinertson should invite them or if the member should invite and/or bring them.

Chief Reinertson spoke next about the regulatory process. Detail was provided regarding the Administrative Procedures Act (APA) and Building Standards Law, laws that have to be followed when developing regulations in California that include additional public participation. There's a lot of opportunity for stakeholder participation either during this work group process, the stakeholder vetting process or the rulemaking process. If the work group recommends change, then Chief Reinertson will lay out the exact process and timeline for the adoption of the regulations.

Kevin White (CPF) spoke with Gene Gantt (CSFA) during the lunch break and they agreed that from the firefighters' perspective in regards to the work group, they're both very comfortable with fire prevention representing the fire service's interests on the work group. Toxicity to the firefighters is Kevin's main concern and he would like to ensure that it's explicit in the questions. Chief Reinertson indicated that the toxicity issue is part of the actual law itself.

## **1. Creating Questions for the Work Group to Address**

- a) **What's the Intent of the Existing Codes and Regulations?** Jesse Beitel (ACC) volunteered to perform research and bring some documentation about this question to the next meeting.
- b) **Assemblies vs. Specific Materials:** Paul Werner (USGBC) stated that part of this issue will depend on the intent which will lead to a better definition of the assemblies vs. materials issue. Having played with a number of test and analysis methods in the past, Paul would like to know if the method that's being used to test actually answers the questions that are being asked. Gordon Damant (Flammability Expert and Consultant) stated that there are two different levels of test methods: material test methods and assembly test methods. BEARHFTI is primarily responsible for material test methods and has very little to do with assemblies. Chief Reinertson advised to leave this issue general and vague and the work group itself can work that out. Lorraine Ross (XPSA) volunteered to create a list of fire tests that apply to specific applications.

Eric Banks (Spray Foam Coalition of CPI) discussed three different areas of concern regarding assemblies: building envelope insulation (roofing, wall), interior elements (partition walls for either sound or thermal insulation) and mechanical items (pipes, tanks, etc.). Eric thinks that the group should come to a determination about whether they're going to address just one, two, or all three of those areas. If the group is concerned with the code, then all three areas should be

examined, but does that fall within the “box”? A few of the group members stated that piping falls under the Mechanical Code. Dr. Hirschler (NAFRA) stated that in the CA Code, the plenum part is in the 2012 CBC; it won't be there in 2015, but it's in there right now. Howard Hopper (UL) suggested that the group should look at 127, Section A- Maintain overall building fire safety; he thinks that Section indicates that wherever there are insulation materials, that's part of overall building fire safety and the group should be looking at the full set.

Chief Reinertson stated that when the legislature was developing this law, they were thinking about those common insulation materials that are typically seen when a building is being framed. He does not think that their intent was to include every nook and cranny, be it pipe insulation or other types of insulation. Perhaps the group should send a request for clarification to the legislature through Cal Fire's Legislative Unit. Even in talking with the sponsor, when the bill was being processed, all of the discussions were centered around the building envelope. Chief Reinertson's recommendation to the group is to consider only the building envelope during the beginning phase of the analysis and, based on time and what comes out of the actual analysis and literature review, perhaps then consider the other types of assemblies.

There was discussion about exactly what's considered to be the “building envelope” and the group agreed that wall cavities, attics, crawl spaces; insulation in a wall no matter where it is in a building- the interior of the building, including below-grade. Chief Reinertson pointed out that although some of the products are used by the Energy Code, they're also used for dwelling separation in apartment complexes- the insulation is used between walls; not as a thermal barrier, not to treat condition vs. unconditioned area, but for sound purposes. Chief Reinertson does not think that the bill was meant to specifically include pipe insulation; there's very limited application with those materials in most buildings.

- c) **The Use of Thermal Barriers in Lieu of Insulation Materials that have a Flame Retardant Chemical:** Chief Reinertson stated that the law doesn't address occupancies; does the work group want to address a specific occupancy or all occupancies? Paul Wermer (USGBC) stated that if the group would like to address the issues of fire and life safety impacts, smoke impacts and human health impacts then he doesn't think that building occupancies play that large of a role. Jesse Beitel (ACC) disagreed and stated that commercial buildings have much more stringent requirements than residential buildings. Chief Reinertson directed the work group to just pose the questions that will be considered right now and later, during the analysis phase, decide the specifics elements of each question that will be addressed.
- d) **What Materials Should Be Targeted?:** Chief Reinertson stated that as Lorraine mentioned earlier, foam insulation is not the only insulation that utilizes this so the work group will need to address which materials should be targeted.
- e) **What Areas of the Building (Per the Law) Should be Targeted?:** Chief Reinertson does not want to only consider the building envelope / wall cavity insulation if it comes out that Assemblywoman Skinner's intent was to target other areas, too. Walter Reiter (EPS) Industry Alliance asked if a transcript of Skinner's testimony would be helpful; Chief Reinertson affirmed that it would be helpful and asked Walter to email him a copy of it which he will distribute to the work group. Walter stated that Assemblywoman Skinner did not limit the scope to cavity insulation in her testimony.
- f) **What is the Effect on Firefighters?:** If change is made, how will it affect the firefighters? This is a very broad question that could concern anything from health effects to structural safety concerns.

- g) Are the Test Methods Currently Being Used the Right Test Methods?** Gordon Damant raised this question and asked if the test methods are meaningful in terms of providing a measurable difference in fire safety in actual use of the products. Dr. Donald Lucas (Lawrence Berkeley National Laboratory) asked if the criteria that's chosen- the flame spread index- is meaningful and is there a link to real world performance?
- h) What is the Criteria that Will be Used to Determine if Fire Safety will be Maintained?** Chief Reinertson advised that, for discussion purposes, the 2013 CBC, CFC & CRC are the baseline guides for building construction.
- i) What are the Economic Impacts?** Lorraine Ross (XPSA) asked if there's a way to judge the economic impacts. For example, ASHRAE Energy has a bar for code change proposals for energy standards; when a proposal is submitted, they assess how much energy is going to be saved and how much it will cost- they use an algorithm. Is this something that this work group could do? Chief Reinertson responded that unfortunately Bob Raymer is absent but this is where CBIA, the manufacturers, the Commercial Industry Association come into play. They may be able to determine how many dollars per square foot it will cost to implement a specific recommendation. This is a question that the work group should reach out to other groups for assistance with; each member of the work group has contacts from whom they could obtain information. The economic impact will be a part of the weighing process and as the group starts vetting things out, it will become evident as to whether or not each proposed change will be achievable.
- j) What Formulations (Foam, Fiberglass, Coating) are going to Be Mandated?** Lorraine Ross (XPSA) inquired if it's conceivable that the group will make recommendations regarding formulations; she cannot imagine that happening. Adria Smith (Cal Chiefs) stated that such recommendations would probably be more of a wish list and would be similar to the vent issue in that recommendations could come out that flame retardants should not have chemical side effects but that could be something that wouldn't happen for ten years or longer / far into the future. Chief Reinertson advised that this is a topic that the work group will have to be very conscience of and if a recommendation is made to go this route, the likelihood is that the group will not be able to do it.
- k) How Will The Distribution Chain Be Affected?** Lorraine Ross (XPSA) discussed her thoughts regarding the issue of whether or not the work group should consider situations that can occur after the products have left the gates of the plants / have been shipped out and have actually been installed. Is a situation like that outside of the group's scope of consideration? Chief Reinertson advised that this kind of situation is outside the scope of the work group's consideration. The law concerns overall building fire safety (construction of); ensuring adequate protection from fires that travel throughout concealed spaces, firefighter safety. So, the group should be concerned only with making recommendation regarding the completed building.
- l) What's the Impact of Fire Sprinklered Buildings vs. Non-Sprinklered Buildings?** Discussion regarding wildland fire (exterior ignition) ensued, Chief Reinertson advised that if a building ignites from the outside (WUI Issue), then obviously there's a firefighter safety issue. CBC Chapter 7A does provide for additional protections around the exterior of the building. Chief Reinertson does not think that the WUI is the catalyst to create change, but it could be an item on the table for the work group to discuss. If 7A is brought up in the analysis and it needs to be addressed, then so be it.

**III B. Meeting Frequency:** Meetings will occur monthly at the SFM Headquarters on February 25th, March 20th, April 17th, May 29th, June 26<sup>th</sup> and July 24<sup>th</sup>. If a group wants to get together to work on a specific item, then SFM has a couple of different conference call lines that can be used as well as GoToMeeting which Chief Reinertson can facilitate. Chief Reinertson advised that within the next couple of days, the Smoke Alarm Task Force's report will be sent out. Also, Howard Hopper (UL) will be sending his notes out to the group and if there's something that needs to be revised or included, then please send those items to Chief Reinertson who will then forward them to Howard.

**III C. Next Meeting:** The next meeting is February 25<sup>th</sup> from 10 AM – 4PM; there will more than likely be a different conference call number which Chief Reinertson will put on the agenda. Chief Reinertson recommended that the work group members start collecting the literature data for review and if there are documents that need to be sent out to everybody, then please send them to Chief Reinertson first so that he can distribute them to the group; please limit each email to 10 MB. Chief Reinertson will eventually create an actual web page which he will populate with information for the group. If members have website addresses where information is already posted, then please email those to Chief Reinertson and he will put those on the webpage, too.

#### **IV. ADJOURNMENT**

Chief Reinertson is confident that the group will complete the required work within the next six months. If other issues arise that should be developed beyond the initial recommendations, additional avenues for the SFM may be available through the normal rulemaking process. The meeting was adjourned at 1400 hours.