



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

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**Residential Fire Sprinkler/Water Supply Task Force
MINUTES
Thursday, November 20, 2008**

MEMBERS PRESENT:

Dennis Mathisen, Roseville Fire Department (Co-chair)
Ernie Paez, CAL FIRE, OSFM (Co-chair)
Ray Bizal, National Fire Protection Association
Jim Bollier, Nor Cal Fire Prevention Officers
Heather Collins, California Department of Public Health – Drinking Water
Darren Drake, Nor Cal Fire Prevention Officers*
Doug Dupree, So Cal Fire Prevention Officers
John Graham, American Water Works Association
Steve Hart, Consultant
Bill Kirkpatrick, East Bay Municipal Utility District
Ed Kriz, City of Roseville Water Utility
Mark Krause, Desert Water Agency*
Bruce Lecair, National Fire Sprinkler Association
Ian Mac Donald, So Cal Fire Prevention Officers
Paolini, Gene, California Building Officials
Peter Solomon, Housing & Community Development
Julie Spacht, Los Angeles Department of Water & Power*
Mike Stewart, Fire District Association

MEMBERS ABSENT:

Bob Raymer, California Building Industry Association
Jennifer Whiting, League of California Cities
Representative, So Cal Water Utilities Association
Representative, American Water Works Association
Representative, Northern California Water Association
Representative, Regional Council of Rural Counties

STAFF:

Vickie Sakamoto, Division Chief, Fire & Life Safety North
Kevin Reinertson, Supervising Deputy State Fire Marshal, Code Development

GUESTS:

Dale Evenson, Riverside County Fire Department
Maria Figueroa, National Fire Protection Association (alternate for Ray Bizal)
*via telephone conference call

INTRODUCTIONS

The meeting began at 9:35, and self introductions were made by all present.

CORRECTION TO MINUTES FROM OCTOBER 9TH MEETING

Ray Bizal pointed out a two changes needed in the minutes. They were on page 4 and are in red text below.

Steve Hart will contact Fred Curry with the PUC, and ~~Ray Bizal~~ Bob Raymer will contact CALBO, so that a representative from each organization will be given the opportunity to join the task force. ACWA and the Rural Water Association were also mentioned as agencies that might want to be represented on the subcommittees.

Ray Bizal said he would send a copy of NFPA 13D and NFPA 22 the Handbook for Residential Fire Sprinklers to all the members of the task force if he were provided with the addresses.

Ray Bizal mentioned he had not had the opportunity to send out the handbooks previously, but he would be doing so within the next couple of days.

SUBCOMMITTEE REPORTS

- **Connection Configuration**

Julie Spacht said her group has been emailing back and forth, and her members have submitted their priority concerns to her. Among the concerns are those pertaining to the overall concept of residential sprinklers, so Julie may be forwarding some of those responses to other subcommittees. Some of her committee members submitted their agency's current configurations, and many of them are very similar. Each of the members has issues needing to be worked through—with the primary issue being the concept of metering. All of the agencies' connections for fire sprinklers are downstream of the meters, and Julie suggested we will probably need to talk to the meter industry and discuss fire rating for meters. The committee will also be looking into the suitability of materials. Julie will be compiling the materials she has received from her team members, distribute the compilation to her subcommittee, solicit comments, prepare drawings, and then hopefully have a meeting with all the committee members.

- **Laws and Regulations**

Steve Hart reported that his group has not had a chance to meet yet. He has been collecting information on current laws and regulations dealing with water supply. One of the things his group needs to look at is Health & Safety Code Section 13114.7 dealing with Class I and Class II regarding backflow. This statute was written in 1982, and Class I and II in this context no longer exist in the M-14 regulation. Steve said that is an example of the regulations he wants to identify as needing to be repealed or amended to the current M-14 standards. Another thing he wants his group to look into is how the University of Southern California (USC) testing lab fits into the area of approved backflow devices in California—what is their authority? do they adhere to M-14? and how do local water purveyors deal with the issue of USC testing in this area?

Heather Collins mentioned the need to be aware we are entering an era of dual plumbed buildings and dual source sites which are overlaid with gray water and many different feed and water supplies on a property (and possibly entering the building). The California Department of Public Health (CDPH) has long been working on revising the backflow regulations for some time, and in those revisions they specifically address the use of certified and listed backflow devices. The draft regulations name USC as the sole entity for both field and lab testing. Under the water code, recycled water may be used for fire sprinklers; however, Bill Kirkpatrick said East Bay Municipal Utility District (EBMUD) has no intention of connecting recycled water to residential services. Julie Spacht said that was the position of Los Angeles Department of Water and Power also. Jim Bollier remarked that some fire sprinkler pipes are very sensitive and may not work well with recycled water.

Steve Hart said he would have hand-outs and documentation ready for the next meeting.

Ernie Paez suggested each subcommittee might want to come up with a list of goals and objectives similar to the process used in the first task force meeting for the group as a whole. Then individual assignments could be made within each subcommittee, and when the subcommittee meets, you organize the information and operate more efficiently.

- **Fees**

Bruce Lecair said that they had a subcommittee meeting scheduled, but the Southern California fires necessitated canceling the meeting.

Bruce asked what the end product was that this task force was supposed to produce. Dennis Matheson responded that as an advisory group, we would determine the issues we feel are important, list the solutions we recommend, and we would present both to the State Fire Marshal. For instance, if the group believes legislation is necessary, we would recommend such legislation be drafted, but we would not draft it ourselves. ***Dennis said he plans to create a template that each subcommittee could use when they have their issues outlined and their final recommendations ready.*** Ray Bizal suggested the templates list facts, reasons, and comments which outline the issues and then list solutions.

Steve Hart interjected that he thinks one of our biggest challenges concerning the water supply issue will be rural California and very small water providers or home owners with an individual well. It could end up costing tens of thousands of dollars to get the water supply for residential fire sprinklers, and Ray Bizal agreed with that assessment. Julie Spacht pointed out that the amount of water needed is not a large amount—18 gallons per sprinkler head (two sprinkler heads) for 10 minutes.

Jim Bollier said that fees were a major issue for consumers in the Bay Area. He made some calls to different water districts in that area, and their fee structures were very divergent. Jim feels the public would be well served if there was some continuity in fee structures. Bruce Lecair remarked that he thought the group might want to consider the idea of fees being based on fire flow rather than sprinkler systems. Julie Spacht warned that water fees is a very political issue, and trying to mandate any kind of a fee structure statewide would be extremely difficult if not impossible. Maria Figueroa agreed with Julie and expressed the concern that water purveyors might use the whole residential fire sprinkler water supply issue as a way of raising income. Mark Krause agreed with Julie's comments and further stated that although some might want to look at a fee structure based on frequency of use, the frequency of use is not relevant to the water purveyor. The water purveyor has to provide the water when it is asked for and build the infrastructure to deliver that water. There is a cost in doing that regardless of how many times—or if ever—it will be used. Steve Hart interjected that the whole issue of fees was often times where the water purveyors and the fire service parted ways. He feels the cost should be related to the amount of water needed for the 10 minutes they would run; whereas Ed Kriz expressed his opinion that it is not just the fire flow and the water, but also the cost of the infrastructure and the maintenance. Bruce Lecair suggested when considering fees, it might be helpful to have a breakdown of all the items consumers are paying for in these systems.

Bruce suggested it would be helpful for the Connection Configuration and the Fees subcommittees to get together at least once.

Bill Kirkpatrick told the group that EBMUD did a series of cost of service studies which were then published—breaking down what it cost to serve over time. He further stated that when considering life safety in connection with the water supply for fire sprinklers, the perspective on the cost can change. There was general consensus the Fees group should look at how both small and large water districts determine the rates they charge. There was some general discussion concerning Proposition 218 and how it affects public water purveyors. Jim Bollier pointed out residential fire sprinklers would bring benefits to the homeowner, the water supply (reduced fire flows for developers), and for conservation—and with those benefits come costs. Julie Spacht expressed doubt that the sprinklers would have much of an impact on conservation; however the point was made by Maria Figueroa that in residences where fire sprinklers are present, 90 percent of the fires are extinguished by those sprinklers. Maria also pointed out that fire damage to residences with sprinklers is far less than those without them. Ray Bizal commented that it takes nearly 10 times the amount of water to put out a fire in a non-sprinkler residence than it does in a residence with fire sprinklers that catch the fire in the very early stages.

Julie Spacht brought up the subject of fire service offsets such as downsizing mains, placing hydrants further apart, and so forth. Dennis Mathison said that several incentives were offered by the fire service in Roseville to move the residential fire sprinklers forward. Ray Bizal pointed out that some trade-offs are written into the modern building codes for buildings with fire sprinklers, but not for one and two family dwellings. ***Maria Figueroa has been compiling a list of possible offsets and she said she could share it with the group.*** Julie brought up the subject of continuity, and Bill Kirkpatrick said that recognition of continuity in the task force recommendations—relative to the different classes of land use—would be a good guidance and documentation for the water purveyors. Bill also briefly recounted some of the challenges water purveys face in regard to pipe size, storage, and water quality—all of which have an impact on fees.

Bruce Lecair said his subcommittee would prepare a presentation on how residential fire sprinkler systems are built, what they look like installed, and what they can do.

Steve Hart stressed the importance of taking what the task force learns and educating the water purveyors and the fire service so that they understand the two different perspectives and the impacts involved. Jim Bollier said the public needs to be educated also, because they don't fully realize the benefits of fire sprinklers.

- **Process Efficiencies & Cost Impacts**

The chair of this subcommittee, Bob Raymer, was not present at the meeting. Darren Drake, a member of the subcommittee, told the task force that Bob had sent out two documents to the subcommittee members: Design Alternatives Relevant to One and Two Family Residential Fire Sprinklers (1995 report) and a Residential Fire Safety Institute article regarding incentives for installing fire sprinklers. John Graham mentioned that in perusing the latter article, he noticed some inaccuracies. ***He also said that he could get the group copies of a study titled Impacts of Wet Fire Systems on Public Water Supplies.*** This report was done by the American Water Association Research Foundation—an offshoot of American Water Works Association (AWWA)—and he felt it was very informative. Steve Hart said this subcommittee might also want to look at AWWA M-31 (chapter 4 or 5) on fire protection, incentives for putting in fire sprinklers, and cost savings for water purveyors.

Ray Bizal said if someone could provide information regarding the status of the PEX lawsuit, that would be helpful.

Peter Solomon said PEX is not acceptable in the California Plumbing Code at present, but there is a proposal for its use in California. Gene Paolini pointed out that many builders are getting away from PEX and going back to PVC and CPVC pipe because of all the issues with PEX.

Kevin Reinertson gave a brief overview of the timeline for the state's next rule-making cycle and answered some questions from the group. Right now we are in the pre-rulemaking phase, and this task force is a part of that pre-rulemaking. The formal rulemaking has to be submitted to the Building and Standards Commission by June 1, 2009, and our justifications have to be submitted to the commission in February 2010.

IDENTIFY DELIVERABLES FOR NEXT MEETING

- 1. Dennis Mathison will work with Ernie Paez and Tonya Hoover to develop a final product template for use by the four subcommittees and the task force as a whole.**
- 2. Bruce Lecair and his subcommittee will provide some educational materials on sprinkler systems.**
- 3. The four subcommittees will give their progress reports.**
Ernie Paez suggested that if each chair of the subcommittees would put together a presentation/report for the next meeting, it would be helpful.

SCHEDULE NEXT MEETING

The next meeting was schedule for Wednesday, December 17, 2008, at the Office of the State Fire Marshal in Sacramento.