

STATE FIRE MARSHAL

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MESSAGE FROM THE STATE FIRE MARSHAL

Let me welcome you to the quarterly newsletter of the CAL FIRE - Office State Fire Marshal (OSFM) updates. Sharing information and "getting the word out" continues to be a focus for the OSFM, but increased workload, meeting commitments, and staffing changes has challenged our efforts to do a monthly report. However, technology has given us a more direct and instant way to communicate through the use of email, website postings, twitter accounts, and Facebook postings. This means with a quarterly report to our stakeholders, there will still be monthly information "traffic" in the form of statewide information blasts that will focus on the immediate information needs. The quarterly newsletter will bring together topics that have broad appeal as well as our continued statewide efforts.



State Fire Marshal
Tonya L. Hoover

This quarterly newsletter provides a look into the last three months of activities that we all can directly relate to. Every activity within the OSFM impacts our emergency services and the protection of our communities. Whether it is the testing of water based fire protection systems, code development, the transportation of hazardous liquids through pipeline, the efforts to collect investigation and post wildland fire damage information, or continued efforts to provide an updated fire service training program, each of these areas directly relate to the fire services efforts to prevent, mitigate, and respond to emergency events that impact our environment and resources.

With the increase in outdoor activities because of our great summertime weather, we cannot forget the role each of us play in keeping our communities safe through proactive prevention messaging and a continuous connection with our communities. During this time of unprecedented drought conditions fire safety should be considered in all day to day activities. Whether it is a family bar-b-que, a family camping trip, or celebrating the 4th of July, careless actions or the misuse of safe-n-sane fireworks can have devastating effects on our neighborhoods, hometowns, cities, and the California resources we treasure. Let's keep reminding those around us how important prevention is in their day to day life.

Lastly, to those that will find themselves among the never ending "fire season" responses, remember to prepare and be aware. There is never a time when safety is not a priority!

Be safe out there,

TONYA L. HOOVER
State Fire Marshal

FIRE ENGINEERING / ARSON BOMB DIVISION

Fireworks Program

The primary function of the Fireworks Programs is the testing and licensing of Pyrotechnic Operators and Companies, and the classification of Pyrotechnic products. The OSFM currently licenses 126 Pyrotechnic Companies and 1,443 Pyrotechnic Operators State and nationwide.

The Fireworks Program collaborates with the OSFM Code Development Program in the promulgation of regulations for fireworks and explosives. An updated fireworks regulation package is currently being prepared for the Office of Administrative Law (OAL) process. The regulation package is expected to be available for public comment in the near future.

Also, the program works closely with the Arson and Bomb Investigation Unit to provide technical and material assistance for the seizure and destruction of illegal fireworks. In calendar year 2013, California law enforcement and fire agencies reported 168,978 pounds of seized illegal fireworks.

The Fireworks Program website provides information on fireworks laws and regulations, pyrotechnic company and operator applications, and lists of currently licensed pyrotechnic operators. Some recent changes to the site include an updated fireworks seizure form, a printable quick reference for Public Safety reflecting changes to California Penal Code, and coming soon, the 2014 Approved Safe and Sane products booklet. The Fireworks Program web site is located at http://osfm.fire.ca.gov/strucfireengineer/strucfireengineer_fireworks.php.

NOTE - All law enforcement and fire agencies must complete the updated [Fireworks Seizure Form](#) and submit it to the OSFM to schedule seized fireworks for disposal. Also, see the updated [Fireworks/Explosives Violations Sheet](#).

Automatic Extinguishing Systems Program

- The Fire Engineering Division, Automatic Extinguishing Systems (AES) Program completed the public comment period for the adoption of the National Fire Protection Association (NFPA) 25 Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems. This document will be published as NFPA 25, 2013 California Edition, based on the NFPA 25, 2011 Edition replacing the 2006 California Edition, based on the NFPA 25, 2002 Edition. The regulation package has now been forwarded to OAL for final approval. The published amendments should be available in Title 19 Chapter 5 within the next 60 days; at the same time, NFPA's publisher BNI will be publishing the document for sale.
- The AES Advisory Committee created a workgroup to address Chlorinated Polyvinyl Chloride (CPVC) piping used in residential fire sprinkler systems. The workgroup met to discuss the issues regarding the installation of CPVC pipe and the Polyurethane Spray Foam Insulation in new and existing residential construction. The purpose of this group was to examine the issues between the possible corrosive/incompatibility of Polyurethane Spray Foam Insulation and CPVC, as well as how to best mitigate issues pertaining to the use of the two products. After several meetings, it was determined that an Information Bulletin was needed. With the cooperation of both industries and the workgroup an Information Bulletin 14-004, was produced. This bulletin has been posted to the SFM website at <http://osfm.fire.ca.gov/informationbulletin/informationbulletin.php>
- At the request of the AES Advisory Committee, a workgroup was created and tasked with collecting information, statistics and examining the potential need for a certification program for individuals who perform installation, testing and maintenance of all fire suppression systems. The goal of the workgroup is to review the data, and make recommendations to the AES Advisory Committee. The AES Advisory Committee will review the information provided by the workgroup and provide any recommendations to the State Fire Marshal. Recommendations will be review, denied or accepted by the State Fire Marshal (SFM). Should recommendations be approved by the SFM, the proposed regulations will then go through the approval process. It should be noted that the development of this regulation package could take up to three years.

FIRE ENGINEERING / ARSON BOMB DIVISION (CONTINUED)

Flame Retardant Chemicals and Fabrics

The Flame Retardant Chemicals and Fabrics Program primary function is the evaluation and registration of flame retardant chemicals and materials used in places of assembly, and the licensing of the applicators. The Program currently has registered 104 approved flame retardant chemicals, 527 approved flame retardant materials and fabrics, 314 approved Limited Applicators, and 123 approved General Applicators.

The Flame Retardant Chemicals and Fabrics Program staff is working closely with the Flame Retardant Advisory Committee to complete a long awaited regulation update. The OSFM anticipates the regulations will be submitted to OAL within the year.

The OSFM website provides information for public safety agencies and the general public regarding the flame retardant industry and Prospective General or Limited Applicators. The Information on the website includes flame retardant laws and regulations, product and applicator applications, lists of currently approved products, and contact information for the Program staff. The Flame Retardant Chemicals and Fabrics Program website is located at http://osfm.fire.ca.gov/strucfireengineer/strucfireengineer_flameretardant.php

STATE FIRE TRAINING DIVISION

Elimination of Shipping SFT Manuals and Student Supplements

****Reminder**** Effective July 1, 2014 State Fire Training (SFT) will discontinue printing and shipping of student manuals and/or supplements with class materials for all SFT approved courses. Instead, these materials are available electronically on the SFT website <http://osfm.fire.ca.gov/training/downloadablesftmanuals.php> for free public download. These electronic versions can be transmitted electronically to students to be downloaded, and printed in a format that meets the needs of the course delivery.

Even though SFT will not be providing hardcopies of course materials after July 1, 2014, students are still expected to have a copy of the appropriate manual or supplement (when applicable), either physically or electronically, along with all other required materials prior to beginning any SFT course. As always, the instructors are expected to ensure that all students are properly equipped for class and meet all of the course prerequisites before beginning any SFT course.

If you have any questions, please contact Kris Rose, Manager of Certification and Instructor Registration at (916)327-2129 or Kris.Rose@fire.ca.gov.

New Curriculum Update

State Fire Training continues to work on updating our professional qualification standards and the corresponding curriculum to meet those standards. As of February 2014, Firefighter II Certification Training Standards and Courses Plans have been approved by State Board of Fire Services (SBFS). The following projects will be presented to the Statewide Training and Education Advisory Committee (STEAC) for approval at the July 17, 2014 meeting: Chief Executive Fire Officer Standards and Curriculum, and Instructor III Standards and Curriculum. The Company Officer Standards and Curriculum, and Instructor I & II Standards and Curriculum were approved by STEAC on April 18, 2014, and the SBFS on May 22, 2014.

New curriculum development projects will continue after the beginning of the fiscal year. SFT will be soliciting help from the California fire service subject matter experts to participate in these new curriculum development projects as cadre members. Information will be posted to the SFT website for those interested in applying to become a cadre member.

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<https://twitter.com/SFTnews4u>

PIPELINE SAFETY DIVISION

Pipeline Safety Seminars

The Pipeline Safety Division annually conducts training and information seminars to hazardous liquid operators, as well as, interested state and local agencies, first responders, and the public.



This past spring, seminars were held in Long Beach, Bakersfield, and Concord. Total attendance for all three seminars exceeded 400 making these the highest attended seminars in the 30 year history of the program.

Presenters from the OSFM, the USDOT – Pipeline Hazardous Materials and Safety Administration, the California Department of Fish and Wildlife, and the American Petroleum Institute provided educational information for both pipeline operators and agency personnel. These presentations can be found online at: <http://www.cce.csus.edu/conferences/calFire/psit/index.cfm?pid=791>

For more information about the OSFM Pipeline Safety Division, visit our website at <http://osfm.fire.ca.gov/pipeline/pipeline.php>

CODE DEVELOPMENT AND ANALYSIS DIVISION

Emergency rulemaking that delayed the effective date for certain fire classification requirements for roof mounted photovoltaic panels/modules [systems]

On April 23, 2014, on behalf of the OSFM, the California Building Standards Commission filed with the Secretary of State an emergency rulemaking change. This emergency rulemaking delayed the effective date for certain fire classification requirements for roof mounted photovoltaic panels/modules [systems] contained in California Code of Regulations (CCR), Title 24, Part 2, known as the 2013 California Building Code (CBC) and Part 2.5, the California Residential Code (CRC).

The OSFM was recently informed by industry that there is an insufficient supply of tested and listed (to the newly established Underwriters Laboratory (UL) 1703 standard) Class A, Class B or Class C fire rated photovoltaic (PV) panels/modules [systems] to meet present demand. This circumstance may have prohibited the permitting of projects to install solar PV systems on roofs, which in turn could have curtailed the efforts to meet current sustainability goals. The emergency regulations delay the effective date to January 1, 2015, for the application of fire classification provisions for solar PV systems on roofs as contained in UL 1703 standard. This will provide suitable time for the testing and listing of PV panels/modules [systems] to meet the current UL 1703 standard. In the absence of a PV system fire rating, it may seem appropriate to substitute the PV module fire classification rating in order to achieve the desired result, which is the preservation of the roof assembly's original fire classification. However, simply using the PV module fire classification rating may not provide the desired result in most cases.

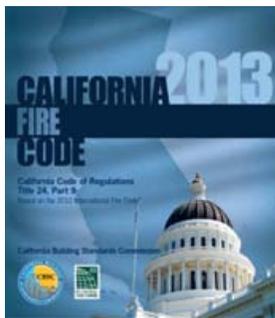
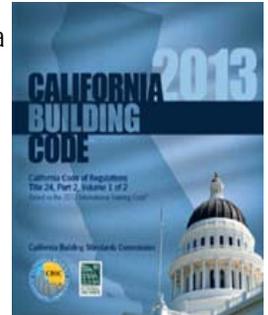
For additional information please see OSFM [Information Bulletin 14-002 Addendum](#)

CODE DEVELOPMENT AND ANALYSIS DIVISION (CONTINUED)

Supplement to 2013 California Building Standards Code Rulemaking Cycle

In accordance with Health and Safety Code 13143, the SFM is proposing certain amendments and building standards for the interim supplement to California Code of Regulations (CCR), Title 24, located in the 2013 California Building Standards Codes. The OSFM is proposing the following subject modifications for the supplement:

- Incorporation and correlation of NFPA 2 Hydrogen Technologies Code into the California Codes.
- Emergency voice/alarm communication system correction.
- Correlation of regulations regarding smoke alarms and statutory changes made by SB 1394 (2012) and SB 745 (2013)
- Clarification of Group I-2.1 occupancy provisions and editorial corrections.
- Adoption of NFPA 502.
- Reinstate miscellaneous model code provisions missing.
- Clarification and editorial modifications for photovoltaic solar systems.
- Clarification and coordination of residential fire sprinkler systems, antifreeze and NFPA 13D and modifications to the referenced standards.
- Editorial or clarifying corrections to the model code or SFM amendments.
- Smoke and heat removal for Group F-1 and S-1 occupancies.
- Clarification and coordination of residential fire sprinkler backflow requirements of the model code.



The California Building Standards Commissions (CBSC) Code Advisory Committee (CAC) reviewed and, in general, gave recommendation to approve the SFM Building, Residential and Fire Code proposals. The SFM will be moving the provisions forward concerning items F-1 and S-1 occupancies and addressing the editorial edits based on the CAC members' comments.

The 45-Day comment period for the supplement began April 25. We anticipate the CBSC to take action to approve and adopt in July/August after all public comment periods close. Publication of the supplement is set for January 1, 2015 with an effective date July 1, 2015.

For additional information please visit the [2013 Intervening Code Cycle webpage](#).

Flammability Standards for Building Insulation Materials Working Group (AB127)

Legislation passed in 2013 added Section 13108.1 to the Health and Safety Code (AB 127, Skinner. Fire safety: fire retardants: building insulation), requiring the State Fire Marshal, in consultation with the Bureau of Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation, 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 State Fire Marshal has convened a workgroup to assist in the review of documentation and provide recommendations to the SFM regarding flammability standards for building insulation materials.

Since January 2014, the workgroup has been meeting monthly to complete a report with recommendations to the SFM. The first two meetings addressed determining the scope of the workgroup, drafting a report template, identifying regulations that would be impacted, and a historical overview of the regulations relating to foam insulation and standards. At the April meeting, the SFM provided the workgroup clarification of intent, scope and direction, to find an alternative building methodology that could eliminate the use flame retardant chemicals in insulation, without reduce fire safety, and could be considered as an acceptable alternative in the California code development process.

For additional information please visit the [Flammability Standards for Building Insulation Materials Working Group webpage](#)

CODE DEVELOPMENT AND ANALYSIS DIVISION (CONTINUED)

Other Significant Activities

- OSFM-CDA staff is participating again on Governor's Office of Planning and Research reconvened Solar Permitting Task Force to update and revise the Guidebook developed in 2012 to include recently adopted SFM regulations.
[Governor's Office of Planning Research – Renewable Energy in California](#)
[Governor's Office of Planning Research – California Solar Permitting Guidebook](#)
- OSFM-CDA staff continue to participate with other state agencies, stakeholders and the California Fuel Cell Partnership in the development of regulations, training, and outreach for the Governor's Zero Emission Vehicle (ZEVs) plan (Executive Order B-16-2012).
[Governor's Office of Planning Research – Zero-Emission Vehicles in California](#)
[Governor's Office of Planning Research – Zero-Emission Vehicles in California: Community Readiness Guidebook](#)

PLANNING AND RISK ANALYSIS

FIRE AND RESOURCE ASSESSMENT PROGRAM (FRAP)

What's an Urban Forest and Just How Valuable is it?

Many Californians live within an "urban forest." What is an "urban forest?" It is the collection of trees and plant vegetation that grow within a city, town, and suburbs where people live.

The cities, towns and their suburbs support about 94% of the population of California. Yet the land base of these areas covers only about 5% of the State. With so many people living on such a small land base, the urban forest is a part of most of our lives. They provide many positive environmental benefits such as air pollution removal, regulating air temperature, reducing energy use, improving water quality, lessening noise pollution, and the storing of carbon in trees.

Based on USFS research by Dr. Greg McPherson, a large canopied shade tree (45+ feet tall with equal spread) in the central valley of CA provides a return on investment of about \$80 per tree per year once you take into account the benefits (air quality, carbon, storm water, energy, property value, etc.) and the costs (maintenance, sidewalk repair etc.). Couple that with a city like Sacramento having over 100,000 city-owned trees (no more than 20% of total Sacramento tree population) and it becomes apparent how valuable these assets truly are (\$8,000,000 ROI for city-owned trees alone per year).

We take for granted how valuable our urban forests are; but how valuable are they? This is not an easy calculation, in part because the environmental benefits from urban forests are often overlooked due to the lack of comprehensive and reliable information on these forests. This lack of information also affects their management and potential benefit impacts.

To address this issue, FRAP applied for and was awarded a \$300,000 State and Private Forestry grant from the U.S. Forest Service to develop improved data on environmental benefits from urban forestry. FRAP has contracted with the University of California at Davis to conduct a Statewide Assessment of Urban Forests. The goal is to create a statewide source of information that utilizes data specific to California to estimate carbon storage and additional environmental benefits.

Work is currently underway; a database of existing tree inventories for urban areas in California has been compiled. Data from the 2010 Census and the recently released National Land Class Data will be used for other data elements while a Modeling for valuation of urban forest benefits will be developed. This model will be reported by six climate regions in California. In addition, a statewide estimate of carbon storage in urban forests will be developed and used to update the State strategy to achieve reductions in greenhouse gas emissions.

The grant project should be complete by March of 2015 and the new data will help support many planning and policy activities. The data will also be used to develop urban forest trends and to identify priority areas to focus future planting and maintenance efforts. This will be done as part of the next Forest and Range Assessment (Forest Action Plan) expected to be released at the end of 2015.

PLANNING AND RISK ANALYSIS (CONTINUED)

FROM WILDLAND FIRE PREVENTION ENGINEERING

Fire Investigation Reporting Linked into to the California All-Incident Reporting System (CAIRS)

CAL FIRE investigators conduct Preliminary Fire Investigations to seek the cause and origin of wildfire. This information has been captured on paper by using the LE-66 Form. This collection process has been simplified by integrating the LE-66 information into the CAIRS data base. The results of this integration provided considerable improvements. These include:

- An auto-populate function which allows the author to reduce input redundancy and potential errors,
- A statewide data base to allow the author to input data from multiple locations, thus reducing late reporting,
- A report tool to analyze ignition data, and
- An ability to retrieve ignition data on a statewide level.

The result over time will provide a level of detail, uniformity and consistency in our data collection that has previously been unavailable. Work continues toward developing additional integration of information for structural fires, vehicle fires, and other incidents for integration into CAIRS.

Post-Fire Damage Inspection Information to go Electronic

Post-Fire damage inspection information currently consists of manually entered data to a paper document which is used to produce a report. The data is stored locally with limited access to multiple fire events. The archived documents that reside in multiple locations create a labor intensive effort to research and analyze data.

The CAL FIRE Damage Inspection Team is currently working to standardize the inspection methodology, develop a standard document template, and standardize and automate the collection of post-fire damage assessment information. The expected time for completion of the project is late summer. When completed, it will be possible to identify damaged or destroyed structures by collecting data onto a mobile device into a statewide data base. The state wide statistical data will be consistent and accessible to researchers, analysts and the public.

FIRE AND LIFE SAFETY DIVISION

The plan review and construction inspection field staff are preparing for unprecedented workload. There are approximately 800 capital outlay projects planned throughout the State by the Board of State and Community Correction (BSCC), Administrative Office of the Courts (AOC), Department of General Services (DGS) and California Department of Corrections, Health Care Facility Improvement Program (CDCR HCFIP). This is addition to the regularly anticipated construction and tenant improvement projects for all other state owned and state leased facilities.

In the first quarter of 2014, the Fire and Life Safety (FLS) Division, has logged in 377 sets of plans with an average bin time of 3 weeks. These numbers have continued to



increase over the last two years. With the approval of these projects, our Deputy State Fire Marshals (DSFMs) will be tasked with an unprecedented number of construction projects that will require multiple inspections; many projects requiring daily inspections. We are proud to announce that our staff numbers are increasing as we have welcomed DSFMs Jason Chavez, Joshua Gibson, Brad Goodrich, Carlos Hernandez, Andy McSorley, Sean Parris, Dawn Robinson, Crystal Sujeski, Darwin Workman and Office Tech, Chris Lopez to the CAL FIRE-OSFM family. We look forward to their contributions to the success of the OSFM and our mission.