

GATED WYE

October 2016 · Oregon Office of State Fire Marshal · 3565 Trelstad Avenue SE · Salem, Oregon 97317 · No. 394

Smoke Alarm Installation Program results and thanks!

During the past three years (July 2013 through June 2016), the OSFM provided 14,553 smoke alarms and \$12,203 in funding assistance (total program costs \$211,288) to Oregon fire service agencies and the American Red Cross through the Smoke Alarm Installation Program.

The OSFM would like to thank the following Oregon fire agencies for installing 7,906 smoke alarms in homes and submitting installation information so we can compare it with future fire incidents to track the success of the program.

500-201 alarms

Baker City FD
Banks FD #13
Coos Bay F&R
Forest Grove F&R
Jackson Co. FD #3
Keno RFPD
Marion Co. FD #1
Oakland RFPD
South Lane Co. F&R

200-101 alarms

Bend FD
Burns FD
Canby FD
Huntington FD
Jackson Co. RFPD #4
Lakeside RFPD
Long Creek FD
Mitchell VFD
Redmond F&R
Sauvie Island VFD
Sisters-Camp Sherman RFPD

100-51 alarms

Bay City FD
Columbia River F&R
Douglas Co. FD #2
Evans Valley FD #6
Fossil VFD
Glide RFPD
Goshen FD
Gresham F&ES
Hillsboro FD
Hubbard RFPD
Illinois Valley FD
Jacksonville FD
Klamath Co. FD #4
Lewis and Clark RFPD
McKenzie F&R
Milton-Freewater RFD
Mist-Birkenfeld RFPD
Molalla FD
Monument FD
North Douglas Co. F&EMS
Pleasant Hill RFPD
Portland F&R
Prairie City FD
Rogue River RFP
Rural/Metro FD
South Sherman RFPD
Sunriver FD
Sutherlin FD
Vernonia RFPD

50 to 26 alarms

Charleston RFPD
Corvallis FD
Crooked River Ranch RFPD
Greater Bowen Valley RFPD
Hermiston FD
Mid-Columbia F&R
Siletz Valley RFPD
Sixes FD
Sweet Home FD
Vale FD

25 or fewer alarms

Aumsville FD
Boardman RFPD
Colton RFPD #70
Dundee FD
Hines FD
Nehalem Bay F&R
Nestucca F&R
Olney Walluski F&R
Polk Co. FD #1
Umatilla RFPD
Washington Co. FD #2
Westside RFPD
Yamhill FPD

From the desk of the state fire marshal



“... Oregon data showed that more than 50% of smoke alarm failures were due to a missing battery, the alarm was disconnected, or the alarm was dead (possibly due to age).”

- Jim Walker

Focusing on prevention

Governor Kate Brown has once again proclaimed October as Fire Prevention Month in Oregon. And this year's theme focuses on checking and replacing old smoke alarms.

Oregon is following the national theme “Don't Wait – Check the Date! Replace Smoke Alarms Every 10 Years.”

Every year, structure fires in Oregon destroy lives and property and put many more lives and property at risk. A majority of these fires are preventable given some planning and care to minimize the risks, along with having working smoke alarms.

The five most preventable causes are: smoking/cigarettes, cooking, heating appliances too close to combustibles, overloaded electrical circuits, and burning candles left unattended.

However, regardless of the cause of home fires, fatalities and injuries dramatically increase in homes without working smoke alarms. This could be due to missing batteries, a disconnected alarm, or the alarm did not work due to its age.

In 2015, Oregon data showed that more than 50% of smoke alarm failures were due to a missing battery, the alarm was disconnected, or the alarm was dead (possibly due to age). By doing your part to increase awareness about this issue you can contribute to reducing this statistic in Oregon.

To help with your fire prevention outreach efforts, our Fire & Life Safety Education Branch has put together a toolkit variety of products and information supporting the Don't Wait – Check the Date! Replace Smoke Alarms Every 10 Years theme.

The toolkit contains electronic copies of fliers, data sheets, and lesson plans, as well as social media graphics, sample messages, video public service announcement, and more.

A toolkit was mailed to every Oregon fire agency several weeks ago; if you did not receive yours, please contact our Fire & Life Safety Education Branch at 503-934-8228 or osfm.ce@state.or.us.



**State Fire Marshal
Jim Walker**

**Office of
State Fire Marshal**

**Oregon State Police
3565 Trelstad Ave. SE
Salem Oregon
97317**

**www.oregon.gov/OSP/SFM
503-934-8200**

Administration
503-934-8205

Codes & Technical
Services
503-934-8204

Fire & Life Safety Education
503-934-8236

Community
Right-to-Know
503-934-8030

Analytics & Intelligence
503-934-8273

Emergency Response
503-934-8030

Fire & Life Safety Services
503-934-8256

Regulatory Services
503-934-8214

Youth Fire Prevention
& Intervention
503-934-8240



The Gated Wye is published monthly by the Oregon Office of State Fire Marshal. For submissions or suggestions contact Rich Hoover at 503-934-8217 or email richard.hoover@state.or.us. In compliance with the Americans with Disabilities Act, alternative formats of this publication are available.

SAIP

continued from page 1

The program is on hiatus until July 2017. We will reopen the application process on June 1, 2017.

If you have a resident without working smoke alarms, have them contact the American Red Cross at preparedness@redcross.org or 503-528-5783, 541-842-4717 (Medford area), and 541-749-4144 (Bend area).

For questions about the program, please contact Stephanie Stafford at stephanie.stafford@state.or.us or 503-934-8219.

Hazmat Rail Emergency Response Training

October 28 & 29, 2016, 8:30 a.m. - 5:00 p.m.
Chemeketa Community College, Brooks Campus
Free to Oregon first responders
Lunch and refreshments provided

This is the first of several free training opportunities to be held at various locations around the state, and is geared toward firefighters and other first responders who may respond on a hazmat rail incident.

The 8-hour course, offered on Friday and repeated on Saturday, is sponsored by the OSFM and hosted at the Chemeketa Community College Regional Training Center in Brooks, OR.

The course addresses all aspects of hazmat rail emergency response, from basic pre-planning to operations and tactics. It includes hands-on training where participants will practice water and foam application techniques on a real tank car, along with key components of rail car anatomy.

There will also be a review of several incidents and case studies, including an in-depth look at the recent crude oil train derailment in Mosier, Oregon, from on-scene personnel.

[Registration is available online.](#) If you have any questions, contact Hazmat Rail Coordinator Chad Hawkins at 503-934-8212 for further details.

2016 Oregon Fire Service Conference

The 2016 Oregon Fire Service Conference, hosted by the Oregon Fire District Directors Association, is October 27 – 29, 2016 at the Riverhouse in Bend, Oregon.

The theme of this year's conference is Creating Connections and Building Bridges Together!

Scheduled topics include:

- Keynote: Foundations of Building Bridges Between Professionals
- Board Member Duties & Responsibilities
- Cascadia Presentation
- Mutual/Auto/Intergovernmental Agreements
- Creating a Fire Authority
- Creating the Culture of Resilience
- Lessons Learned from the UCC Shooting
- Industry Updates
- Caring for the Future Generation, and more

For complete information and to register, [visit the OFDDA website.](#)



Fire & Life Safety Education Manager Claire McGrew (left) and State Fire Marshal Jim Walker with the Governor signed proclamation declaring October as Fire Prevention Month in Oregon.

CODE *Corner*

by OSFM Deputy David Mills

In April 2016, the Oregon Fire Code Committee formed a subcommittee chaired by Marion County Fire District 1 Fire Marshal Paula Smith, to address public assembly use activities at agricultural properties.

The subcommittee enlisted stakeholders from the Marion County Farm Bureau, with a number of local event farmers participating, as well as fire department personnel, in providing insight and guidance to a new Section 11 included within our current Technical Advisory 15-01 "Statewide Guideline for Fairs, Trade Shows, Carnivals, or Common Venue Events."

The new Section 11 addresses "Temporary Public Assembly Uses on Agricultural Property." Notable stakeholders who worked tirelessly and helped craft Section 11 of the TA were Laurel Williams with Court Street Consultants and John Zielinski, President of Marion County Farm Bureau. Both members solicited input from farmers and event coordinators in developing this TA.



This TA guideline also incorporates a fire safety checklist, sample site plans, and a program schedule to assist event coordinators and fire code officials in planning and inspecting these events. The goal of the TA section is to apply consistent guidelines in the application of fire and life safety regulations for assembly uses at agricultural properties. Look for this document on the OSFM website soon.

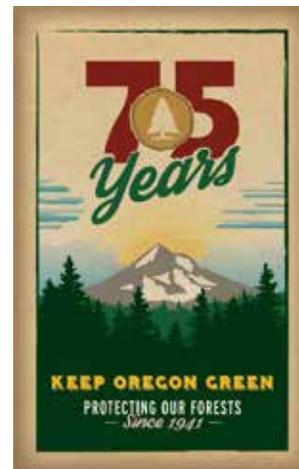
KOG 75th Anniversary Gala

Keep Oregon Green turned 75 this year and to celebrate they are hosting a 75th Anniversary Gala and Auction, Saturday, November 5, 2016, at the Columbia Edgewater Country Club in Portland.

The Western Chic themed evening will begin at 5 p.m. with drinks, hors d'oeuvres, and a silent auction. Dinner will be at 7 p.m. followed by a lounge party and live music at 9 p.m.

Rooms are still available for those who would like to stay the night at the nearby Courtyard by Marriott-Portland North Harbor. Transportation from the Columbia Edgewater to the hotel will be provided post-event.

Visit the [KOG Eventbrite website](#) for more details and ticket prices or contact Ashley Bean at 503-945-7498 or ashley.bean@oregon.gov.



OSP memorial dedicated

The Oregon State Police Fallen Trooper Memorial Board formally dedicated their fallen trooper memorial on the grounds of the Oregon Capitol on October 1st. Speakers included Governor Kate Brown, Senator Betsy Johnson, Superintendent Travis Hampton, and Mr. and Mrs. Lyons whose son's name is one of the 33 names on the memorial that remembers those OSP troopers who made the ultimate sacrifice for all Oregonians.



Three reasons why the National Fire Incident Reporting System is important

The fire service responds to all types of emergency and non-emergency incidents. The full effect of these responses is only realized if the incidents are documented, reported, shared, and analyzed.

The tool for achieving this full effect is the National Fire Incident Reporting System. NFIRS data helps fire agencies fight fires with facts. It's the largest database of fire incidents in the world.

In 2015, more than 23 million incidents were reported in NFIRS to the U.S. Fire Administration, and in Oregon, more than 300,000 incidents were reported to the Office of State Fire Marshal.

Nationally:

- An incident was reported in NFIRS every 1.4 seconds
- An EMS/rescue incident was reported every 2 seconds
- A fire incident was reported every 29 seconds

In Oregon:

- An incident was reported in NFIRS every 1.5 minutes
- An EMS/rescue incident was reported every 2.2 minutes
- A fire incident was reported every 35 minutes

Why is NFIRS important to the fire service?

1. NFIRS helps the fire service quantify what it does.

We are connected to data in many of our day-to-day activities (communicating, relaxing, travelling, and working). Everything we do seems to be data-driven. This data is collected and leaves footprints of our activities.

For the fire service, NFIRS leaves sets of data footprints that track and quantify the activities of fire agencies in the United States. NFIRS documents emergency and non-emergency response activities while allowing the fire service to tell its story in an objective way through its data.

2. NFIRS allows the fire service to speak the same language when comparing and sharing data.

Data is an effective component in communication. The fire service uses NFIRS as an acceptable, common, and proven way of communicating because it's the national standard that fire incident reporting software uses to collect and report emergency response activities. It's based on the National Fire Protection Association standards, overseen by the Technical Committee on Fire Reporting.

More than 23,700 fire agencies – 78 percent of fire departments in the United States – participate in NFIRS. In 2015, 94 percent of all Oregon fire agencies participated. This common language allows the fire service and other users of NFIRS to document, analyze, and report their data.

3. NFIRS is a critical business asset.

The fire service must understand that NFIRS data is a critical business asset, something of value that adds worth. NFIRS data is an asset because it allows users of NFIRS to identify trends, quantify activities, determine causes, plan the deployment of limited resources, and help in the reduction of loss of life and property caused by fire.

How Does Oregon Compare?

The US Fire Administration's National Data Center provides comparative information on incidents each state has reported to the national level, and breaks that down to show how many of those incidents were fire and EMS. Based on this information for 2015 (as of 7/21/16), Oregon compared to the other 49 states as follows:

In the total number of incidents reported, Oregon was 21st with 347,730. Florida had the most with 2,066,710 and North Dakota had the least with 2,937.

In total number of EMS calls reported, Oregon was 19th with 238,883. Florida had the most with 2,036,116 and Delaware had the least with 14,438.

In the total number of fire calls reported, Oregon was 28th with 14,371. Texas had the most with 80,657 and Wyoming had the least with 1,894.

Questions? Please contact the Analytics & Intelligence Unit at 503-934-8250, toll free at 877-588-8787, or email osfm.data@state.or.us.

***HAZMatters*: Evacuation guidelines - Part 3**

by OSFM Emergency Response Branch Manager Michael Heffner

Sheltering-in-place, as a public protective action, may be recommended when the act of evacuation might increase the risk of exposure to toxic contamination. Some decision-making models even recommend using sheltering-in-place as the initial community response, allowing emergency managers to further analyze the problem and deliver actionable emergency notifications to the public (Shumpert, Sorensen, & Vogt, 2004).

Conducting a basic inventory of shelters adequate to protect victims within the estimated evacuation zone may add to a decision-making model used by emergency officials (Interagency Policy Coordination Subcommittee for Preparedness and Response to Radiological and Nuclear Threats, 2012). However, the actual effectiveness of sheltering-in-place is known to be influenced by the air exchange rate of the shelter, temperature differentials between the shelter and the outdoor environment, the length of time a chemical cloud blankets the shelter, and wind speed (Barton, Chandler, Goad, Harris, & Tarkington, 2009). Literature also identifies additional factors, such as the time needed by the public to shelter-in-place and whether any chemicals infiltrated inside the shelter before it was securely sealed up (Chan, Gadgil, Nazaroff, & Price, 2007).

Researchers have demonstrated through case studies and controlled experiments that sheltering-in-place limits exposure to chemicals such as ammonia (Barton, Chandler, Goad, Harris, & Tarkington, 2009). They noted that in a number of actual anhydrous ammonia releases, injuries and fatalities were minimized when sheltering-in-place strategies were implemented.

In 1969, a 29,200 gallon release of anhydrous ammonia in Crete, Nebraska resulted in only minor injuries to those who sheltered-in-place. In 1976, a 7,509 gallon release in Houston, Texas resulted in fewer injuries for those who sheltered-in-place than for those who attempted to evacuate in their cars. In 1977, a 33,500 gallon release in Pensacola, Florida resulted in injuries only to those who were in contact with the gas cloud while they were being rescued, suggesting that their injuries may have been lessened if they had elected to

shelter-in-place. In 2002 a 146,700 gallon release in Minot, North Dakota resulted in only one death, which analysts credited to the shelter-in-place actions being taken in the affected community.

The Oak Ridge National Laboratory has established four levels of sheltering: normal, expedient, enhanced, and pressurized sheltering (National Institute for Chemical Studies, 2001).

- Normal sheltering involves retreating inside of a structure, closing doors and windows, and shutting down the shelter's air circulation system.
- Expedient sheltering requires the additional steps of sealing windows, vents, and electrical outlets with plastic sheeting and duct or painter's tape.
- An enhanced level of sheltering takes advantage of infiltration-reducing measures such as weatherization, window caulking, weather stripping, and storm or multi-pane windows.
- The highest level of sheltering requires using a filtered blow unit to pressurize the shelter, keeping a positive pressure inside the shelter to keep contamination from filtering inside.

The literature reinforces that for these levels of sheltering-in-place to be effectively implemented, the public must be educated, equipped, and practiced in the steps of sheltering-in-place (Chan, Gadgil, Nazaroff, & Price, 2007).

Oregon's local emergency planning committees (LEPCs) are an excellent venue for evaluating which emergency actions would best protect the public based on a variety of scenarios. These county-based planning groups – comprised of stakeholders from emergency response, emergency management, community leadership, academia and local industry – work together to establish community emergency response plans that identify facilities and transportation routes of extremely hazardous substances, determine the probability of populations affected by a chemical release, outline emergency procedures and evacuation plans, and develop training and exercises. For more information on how to be involved in your county's LEPC or to review their plan, contact Terry Wolfe, OSFM LEPC Coordinator at (503) 934-8245 or terry.wolfe@state.or.us



Gasoline

Description:

- Colorless liquid with a characteristic odor. May be dyed for recognition
- Complex mixture of petroleum hydrocarbons.
- Consists mainly of hydrocarbon groups of 4 to 12 carbons, mostly paraffin's, isoparaffin's, cycloparaffin's, and aromatics
- n-Hexane (1.5 - 3.0%) and benzene (0.5 - 2.0%) are normally present
- Hazard classes: 3.1; flammable liquid (flash point below 0 deg F), 6.3; acute health hazard
- CAS No.: 8006-61-9
- UN-NA No.: 1203

NFPA 704 Placarding Information:

- Health -- 2
- Flammability -- 3
- Reactivity -- 0
- Special Notice -- none given

Uses:

- Used primarily as motor fuel in spark initiated internal combustion engines

Reactivity and Fire Risk:

- Normally stable. Non-corrosive to metals
- Incompatible with strong oxidizing agents (peroxides, nitric acid, perchlorates)
- Extremely flammable, ignites readily at room temperature
- Vapors can ignite by static discharge
- Vapors are heavier than air and can travel to source to ignition and flash back
- Liquid can float on water and may travel to distant locations spreading fire
- Containers may explode in heat of fire

Health Hazards:

- Inhalation of vapors can cause central nervous system depression, unconsciousness, and possible pulmonary edema (fluid on the lungs)
- Mildly irritating to skin, may cause serious irritation and burns when in contact with skin for extended periods of time
- Vapors only mildly irritating to eyes, not likely to cause permanent damage if eyes are rinsed
- Moderately toxic if ingested, may cause irritation to mouth, throat, and gastrointestinal tract

Personal Protective Equipment:

- Normal conditions: splash-proof chemical safety goggles or face shield, and impervious gloves, coveralls, and boots
- Fire conditions: wear special protective clothing and positive pressure SCBA

Inspection and Storage Tips:

- Store in cool, dry, well-ventilated area out of direct sunlight
- Area should be clearly marked and accessible to trained and authorized personnel only
- Must be stored away from heat and all sources of ignition
- Store away from all incompatible materials, such as strong oxidizing agents
- Bond and ground metal containers in storage areas
- Floor should be sealed to prevent absorption

Chapter 50 OFC Information:

- Class I-B flammable liquid
- Group S occupancy exempt amounts allowed per storage control area:
 - Unprotected by sprinklers or approved cabinets: 120 gallons
 - Within approved storage cabinets, in unsprinklered building: 240 gallons
 - In sprinklered building, not within approved cabinets: 240 gallons
 - In sprinklered building, stored within approved cabinets: 480 gallons
- Storage amounts may be more restrictive for some applications, see OFC
- For storage of quantities exceeding the allowed exempt amounts for a Group S occupancy, the storage facility must conform to H-2 or H-3 occupancy requirements as outlined in the OSSC

Incidents and Reporting Information:

- There have been 596 hazardous materials related incidents in Oregon involving gasoline since 1986

For questions or suggestions, call 503-378-6835.

OSFM employment opportunities

Compliance Specialist 2

(Non-Retail Fuel Dispensing Program)

Salary range: \$3,691 - \$5,396 monthly

This recruitment is for a permanent full-time position with the Department of State Police, Office of State Fire Marshal Division in Salem.

Duties include, but are not limited to, conducting fire and life safety inspections of non-retail (cardlock) fuel facilities to ensure compliance with adopted statutes, administrative rules, codes, and other applicable fire and life safety requirements. Coordinate with local fire officials, industry representatives, customers, and general public concerning installation of non-retail fuel dispensing facilities. Coordinate with facility operators and their customers to determine acceptable customer qualification documentation. Investigate alleged violations of Oregon's fuel dispensing statutes and rules.

For a complete job description and qualifications visit the [Oregon Jobs website](#). Check back with the Oregon Jobs website as more compliance specialists positions will be opening soon.

OSFM staff changes

- Regulatory Service Unit Compliance Specialist 2 Matt Rodriguez, promoted to Fire & Life Safety Services Branch Compliance Specialist 3.
- Regulatory Service Unit Program Assistant Rachel Fellis was promoted to RSU Administrative Assistant 1.
- OSFM Youth Fire Prevention and Intervention Coordinator Krista Fischer is retiring! There will be a retirement celebration from 1:30 to 3:00 p.m., October 31, 2016, at the OSFM Salem headquarters, 3565 Trelstad Ave. SE.

If you would like to attend, please contact Bethany Emmert at 503-934-8366 or bethany.emmert@state.or.us.

OFMA TEC Conference is October 18-19

Register now for the upcoming Oregon Fire Marshals Association [Technical Education Conference](#) October 18 – 19, 2016, at the Department of Public Safety Standards and Training in Salem, OR. The \$195 [registration](#) fee (OFMA / OBOA member price) includes access to industry experts / speakers, equipment displays, and seven contact hours of approved ICC credit per day. Continental breakfast, lunch, and snacks will be provided daily.

OFMA has assembled knowledgeable presenters to deliver information you can immediately apply in your workplace or on the job. Industry experts will share in-depth information on the AES radio system and annual fire alarm system testing. Attendees will also participate in a peer-to-peer table topics session discussing:

- Enforcing OFC Chapter 11 with Oregon amendments (OFC 1101.1)
- Enforcement of Mobile Food Concession Stands
- High-Piled Storage
- Illegal Occupancies
- Authority to Access Commercial Property

Day two is devoted exclusively to cannabinoid processing. Presentations cover: regulatory issues, code review, code enforcement, third-party peer review of processing equipment and facilities, and CO2 and LPG-type extraction equipment.

For more information, contact Stephanie. Watson@wfca.com or call 844-372-1859.

Save the Date

**Oregon Office of State Fire Marshal
2017 Task Force Leader Symposium**
Newport, Oregon

Tuesday, February 28: 1000 - 1700 (lunch provided)

Wednesday, March 1: 0830 - 1530 (breakfast & lunch provided)

Focus on structural triage, prep, and tactics

This training is intended for current task force leaders and assistants, and those anticipating to fill the role in 2017