GATED WYE

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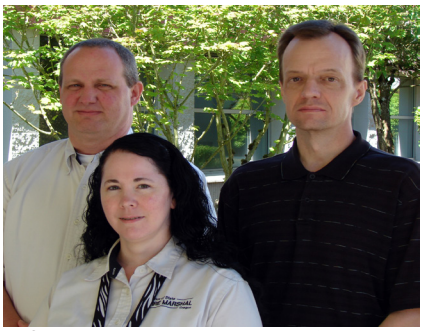
Data Collection & Research unit is changing its name

The OSFM Data Collection & Research unit has been known primarily for collecting incident reports submitted by local fire agencies. Although the unit continues this important function, it is now leveraging capabilities with emerging technology and has become more dynamic in its capabilities and services.

Today, the unit does more than just provide totals on the number of fires in the state. It's involved with operations from every branch of OSFM - from tracking local fire resources that can be used for statewide mobilizations, to collecting and disseminating key information pertaining to the Oregon fire service, to its involvement with the agency's key performance measures.



left to right, Analytics & Intelligence Coordinator Dave Gulledge, Administrative Assistant Candice Clark, and Research Analyst John Phillips

Externally, the unit helps local fire agencies provide optimal emergency services through the effective use of information, collaborating with the Oregon State Police Arson & Explosives unit by sharing information and resources, and its involvement with the state's geographic information services preparedness framework.

To reflect these significant advances, the Data Collection & Research unit is changing its name to the Analytics & Intelligence unit. For more information, contact Dave Gulledge at 503-934-8273 or dave.gulledge@state.or.us.

New smoke alarm tip sheet available

Between 2004-2013, 348 people died and 2,572 people were injured as the result of fires in Oregon; 62% of these fire-related casualties occurred in single and multi-family dwellings.

More than half of fatal residential fires occurred where smoke alarms were present, but those alarms only operated in a third of the incidents. A primary reason for smoke alarms not operating was due to a missing or disconnected battery.

In fires resulting in a death or injury where smoke alarms were present, alarms operated in four of every five fires. Conversely, in eight out of ten of the fires where smoke alarms failed to operate, a missing or dead battery was the cause.

The OSFM, with participation from the Oregon Life Safety Team, developed a smoke alarm tip sheet, available as a poster or flyer, for fire agencies to distribute to citizens and community partners. Order the poster or download the flyer.

If you would like more information, call 503-934-8228 or email osfm.ce@state.or.us.

From the desk of the Interim State Fire Marshal

> "Many resources exist at the local and state level to help individuals and agencies prepare for our inevitable disasters."
>
> – Jim Walker

Preparedness is more than just a plan

Although large scale disasters are infrequent, preparing for them is one of those critical "just in case" precautions. But what does being prepared mean? What can you do on a personal level? What is being done on the local or state level?

From the recent Two Bulls fire in Bend to the even more recent 8.0 earthquake in Alaska and resulting Tsunami alert, we all know these disasters are coming; so how are we preparing for it now? Many of the 250 residents affected by the Two Bulls fire were not prepared to act. Yet had they read through the national Ready, Set, Go! program, they would have been.

Being prepared for any incident, large or small, can be as simple as ensuring you have working smoke alarms in your home to involving your agency in a local emergency planning committee to develop and practice community wide emergency response.

Many resources exist at the local and state level to help individuals and agencies prepare for our inevitable disasters.

All of our OSFM units and programs play a role in assisting fire agencies and the public with preparedness planning and providing resources to take the "next step" to train, test, or practice the plans they have developed. These include our Community Right-to-Know program, Local Emergency Planning Committee program, the State Emergency Response Commission, Fire and Life Safety Education branch, our Analytics and Intelligence program, inspection program, licensing and permits program, and our our deputy state fire marshals.

You can read an overview of all of these OSFM elements on page 4 and 5.

Please contact us if you have any questions or other needs. We stand ready to help.

Interim State Fire Marshal Jim Walker

Office of State Fire Marshal

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Codes & Technical Services
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Fire & Life Safety Education
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Community Right-to-Know
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Analytics & Intelligence
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Emergency Response
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Fire & Life Safety
503-934-8256

License & Permits
503-934-8264

Youth 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.

FDBC Pre-Season Call-down Drill a success

The OSFM conducted its second annual Fire Defense Board Chiefs (FDBC) Pre-Season Call-down Drill on May 21, 2014. Thirty-five personnel and twenty-seven counties participated in the six-hour drill.

Counties were grouped and divided in one-hour time frames; each chief was given a specific task force configuration and asked if they could meet the request. If so, the FDBC would complete the required paperwork. Many counties extended participation to include their local fire departments.

The purpose of the drill was to improve the operational readiness of the State Mobilization Plan and the OSFM Agency Operations center. The drill was designed to promote emergency preparedness, test OSFM operations and procedures, and train personnel in contacting and requesting fire resources.

Drill training began in early January with the planning and design stage. A wildland/interface fire scenario was created and divided into three phases.

Phase one focused on skills and tasks needed to activate the Agency Operations Center (AOC). Phase two involved OSFM personnel responsible for working in the AOC during extended operations; and phase three included the FDBC Pre-Season Call-down Drill.

Goals and objectives included testing rosters, the requesting and sending resources process, and refining the new format and completion of the Task Force Strike Team Leader form.

FDBC Drill Accomplishments:

- Provided an important training opportunity
- Great participation by Fire Defense Board Districts
- Contact rosters were updated
- Counties met target time frames, as described in the State Mobilization Plan
- Identification of 18 task forces

The OSFM thanks the following counties and staff members for participating:

Counties included: Baker, Benton, Clackamas, Clatsop, Columbia, Curry, Deschutes, Douglas, Gilliam/Morrow/Umatilla, Grant, Harney, Hood River, Jackson, Jefferson, Josephine, Klamath, Lane, Lincoln, Linn, Malheur, Marion, Multnomah, Sherman, Union, Wasco, Western Douglas/Lane, and Yamhill.

OSFM staff included: Shawna Fenison, Victoria Sartain, Jaime Zinck, Jamie Kometz, Brent Griffiths, Valerie Abrahamson, and Tina Toney.

OSFM hires new deputy

The OSFM has hired Shannon Milller as its newest deputy to cover Lincoln, Polk, and Yamhill counties. Below is a brief biography.

Shannon spent time growing up in Oregon and Las Vegas, NV. She joined the U. S. Coast Guard and served as a boatswain's mate in Portland, OR and Key West, FL.

After her service with the Coast Guard, Shannon became a volunteer and paid firefighter in Key Largo and Ocean Reef, FL. At the same time, she also worked for the Florida State Park Service as a diver for Pennekamp State Park.

Shannon returned to Las Vegas and in 1997 finished her college degree in fire science. She worked for American Medical Response as an EMT-I and as a fire inspector for Clark County (NV) Fire Department (CCFD).

Shannon was in charge of McCarran International Airport where she worked on completion of projects such as Terminal 3 and a new 82,000 sq. ft. hanger for Sands Aviation. While in Las Vegas, Shannon also worked for the high-rise team and as a night inspector for nightclubs. She was also very involved with the CCFD and Nevada Emerald Society Pipe and Drum Corps.

"I am stoked about my new career with OSFM as I will be learning a whole new part of the fire code, fire investigations, and plans checking. My co-workers are incredible and a pleasure to work with as every person I have met so far is informative, intelligent, and very helpful. The area is so green with water, events, and culture."

Overview of OSFM preparedness efforts and resources

State Emergency Response Commission

The OSFM is designated as the State Emergency Response Commission (SERC). The SERC's role in preparedness comes through designating emergency planning districts and establishing local emergency planning committees (LEPC) within those districts. Working together they create and exercise emergency plans that are intended to help emergency responders quickly and safely mitigate a release and protect the surrounding community.

An LEPC can enhance the preparedness level even more by engaging citizens that live or work around these facilities and educating them on how to recognize a release has occurred and how to shelter-in-place, or evacuate using pre-determined routes.

The SERC also receives grant funds to support planning, training, and exercise projects related to hazardous materials emergency response to transportation incidents. All of this enhances the preparedness and response of citizens and public safety officials.

CR2K

Knowing about hazardous substances prior to an emergency is paramount in the preparedness process, which helps to save lives and protect the environment. The OSFM Community Right-to-Know program collects and maintains vital information on hazardous substances and their location within businesses and industries. This information is made available to citizens, first responders, and local emergency planning committees, helping all of them make emergency plans and practice the actions to take in case of a hazardous material release in their area.

Hazardous Materials Response Teams

The effectiveness and safety of hazmat teams is being increased with better technology (computers and software) to allow for earlier identification of hazardous materials, their amount, and location while responders are enroute to a incident.

Knowing they have this capability, responders can implement this into their preparedness and response plans thereby increasing their own safety as well as those directly affected by the incident.

Inspections

Inspections are one of the methods used by the Fire and Life Safety Services branch to protect the life safety of some of Oregon's most vulnerable citizens. OSFM deputies accomplish this through the thousands of inspections of state licensed facilities such as day care centers, assisted living and residential care facilities, residential schools, and treatment centers. These inspections are critical for:

- Identifying fire and life safety hazards and getting them corrected to reduce the life safety threat to the public, improve firefighter safety when fighting fires, and reduce property loss.
- Educating private and public sectors on identifying, understanding, and preventing fire and life safety hazards from occurring in order to maintain a pro-active fire prevention advantage.

Codes

A common misconception about the Oregon Fire Code (OFC) is that it's a building maintenance document. This assumption is incorrect. The OFC is a design document that advances the fire and life safety of first responders as well as property protection by providing a comprehensive, integrated approach to fire code regulations and hazard management.

Construction of any building must include requirements for fire department access, water supply, and the necessary fire protection systems. When you add in the variables of hazardous processes or hazardous materials used in refrigeration systems, lead-acid batteries, or a diesel/LP gas fueled generator, it makes for a complex structure with construction elements that must be satisfied to provide a safe and affordable building.

Fire safety is a major component of building safety. The OFC is aimed primarily at preventing fires, ensuring the safety of fire fighters and emergency responders, availability of necessary equipment and training, and that the building designer's basic plan is not compromised.

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continued on facing page

preparedness efforts and resources

continued from page 4

License and Permits

Each program in the License and Permits unit is a fire and life safety program designed and dedicated to protecting Oregon citizens, first responders, and those in each of the regulated industries.

The Fireworks program works to protect the safety of the public and first responders by ensuring each retail outlet and public display company is properly certified and permitted. This ensures proper safety measures and proper fire protection precautions are in place. Every year, this program hosts a media education event covering fireworks safety and makes public education materials available to fire agencies statewide for distribution throughout their jurisdictions.

The Non-retail Fuel Dispensing program licenses and inspects cardlock facilities to provide a safe fueling environment for users. OSFM staff inspect customer records to ensure safety training is given to each cardlock customer on such topics as locations of emergency shut-off switchs, fire extinguisher locations, as well as fuel spill response and other safety measures.

The Novelty Lighter program enforces the Oregon prohibition of lighters that resemble toys, have visual or audible effects, or have a misleading design that children may find attractive. This program educates retailers and parents on the issue of toylike lighters and how to keep these dangerous instruments out of children's hands.

The Liquefied Petroleum Gas program ensures the safety of the public and first responders through the licensing of companies performing LPG work. The licensing requirement confirms they have adequate knowledge of propane systems, increasing employee and customer safety.

OSFM compliance officers regularly inspect residential tanks and bulk plants for safe installation. Employee training records are also checked to make sure their safety training is current. All these elements combine to ensure members of the LPG industry are prepared to prevent or appropriately respond to propane emergencies.

Adult Fire Prevention and Safety

This program develops education campaigns and resources for both the general public and fire agencies to address Oregon's top fire causes, and includes:

- Smoke Alarm Installation program for fire agencies to help install smoke alarms in the residences of some of Oregon's most at risk populations. This not only enhances their safety but that of first responders as well.
- Home escape plans available free to all fire agencies so they can distribute them to residents and instruct them on practicing their plan to ensure everyone in the home knows how to get out quickly and meet up at a safe place.
- Education resources on the top home fire causes in Oregon. Numerous OSFM educational resources are available to assist fire agencies with educating families on fire safety when dealing with cooking, heating, candles, electricity, and more.
- Older adult fire prevention program that helps older adults improve their fire safety and chances of surviving a fire whether living independently or in a group facility.

Youth Fire Prevention and Intervention

This program shepards a crucial partnership between fire service, law enforcement, social service, and school professionals for the education and intervention of youths misusing fire, and their families. Staff train teachers and caregivers on OSFM's fire safety curriculum for preschool, elementary, and middle schools. Other resources for fire agencies to increase the preparedness and safety of kids in the classroom include:

- Report School Fire toolkit for schools and fire agencies to work together on reporting school fires.
- School Resource Guide to Evacuation Planning so schools can prepare for and practice safety actions or evacuations in case of fire, earthquake, shelter in place, and lockdown.
- Classroom Guide to Fire Safety poster that lists common situations teachers need to be aware of that can become a fire safety issue.

DATA *Connection*

News from the Analytics & Research unit
by Program Coordinator Dave Gulledge

Every year since 2010, the number of structure and vehicle fires has remained relatively constant while the number of outside fires has increased by an average of 5% each year. These outdoor fires include grass fires like the one above. So, how do you code that?

The incident type would be 143-Grass fire. If this was brush or a mix of brush and grass, it would be coded as 142-Brush or brush-and-grass fire. That's the easy part.

The most common miscoding on these types of fires relates to the Property Use field. The property use refers to the actual use of the property where the incident occurred, not the kind of property or ownership. In this case, we are dealing with an open field which would be coded as 931-Open land or field. That sounds simple enough, but imagine if the photo of this fire was taken from the porch of a single family home and the fire is on their property. Would that matter? It shouldn't.

When these types of fires occur on private land, there may be a tendency to code the property use as residential. The property use is often incorrectly recorded as 419- 1-or 2-family dwelling in these situations. Whether it's a typical residential yard or a larger spread, such as the one in the photo, grass fires typically occur outside and need to be coded that way.

Other acceptable property use codes for grass fires like this would be 936-Vacant lot or 938-Graded and cared for plot of land, including parks cemeteries and residential yards. Both are outside property uses.

To list the incident type as a grass fire and the property use as 1-or 2-family dwelling indicates that the fire occurred in (or on) the dwelling, which is usually never the case.

The area of fire origin for this fire would be 94-Open area, outside. The heat source could be a variety of things; however, recent data suggests that smoking materials (cigarettes, cigars, pipes, matches, etc.) are more likely to be the ignition heat source. Provided the grass is what was ignited first, the item first ignited here would be 72-Light vegetation (not crops).

When completing the Fire Module on any outdoor fire, the estimated total acres burned needs to be entered in the Acres Burned field. If the total was less than an acre, that field should be left blank and 'Less than one acre burned' should be marked. In any event, you cannot select 'None' for acres burned on most outdoor fires.

If there was an outdoor fire (Incident type codes 141-143 or 171-173) the area of damage is measured in acres. If there was not enough combustion to consume anything, the incident should probably not be coded as a fire.

As with all of the articles in the 'How do you code that?' series, the information provided is based on typical situations. There may be unique incidents or situations where other codes may need to be used. If you encounter a unique situation or are unsure how to properly code an incident, we will be happy to assist you.

When it comes to grass fires or any situation, not coding incidents properly is doing nothing more than creating bad data. We all know how the saying goes – "Garbage in, garbage out." With good data we can correctly identify the problem and take actions to keep that problem from harming people, property, or the environment.

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

Chemical of the month by Aleta Carte

Isobutyl Acetate $C_6H_{12}O_2$

Description:
- Isobutyl acetate (iso-butyl acetate) is an isomer – isomers have the same molecular formula but different chemical structures
- Other isomers are n-butyl acetate, tert-butyl acetate and sec-butyl acetate
- Synonyms: 2-Methylpropyl acetate; isobutyl ester of acetic acid
- Clear colorless liquid with a fruity odor
- CAS No.: 110-19-0
- EPA Section 302 EHS: Not listed
- EPA Section 112R : Not listed
- EPA Section 304 EHS: Not listed

NFPA 704 Information:
- Health: 1
- Flammability: 3
- Reactivity: 0
- Special: None

Uses and Occurrences:
- Manufactured and found naturally in some fruits
- Used as a solvent in thinners and lacquers

Reactivity and Fire Risk:
- Stable
- Highly flammable
- Flash point: 64 - 72° F
- LEL: 1.3%; UEL: 10.5%
- Autoignition temperature: 761 - 806° F
- Vapor density (air = 1): 4.0
- Specific gravity (water = 1): 0.867 – 0.871
- Boiling point: 239 - 243° F
- Reacts with acids to give alcohols and other acids. Reactions with strong oxidizing acids may ignite the reaction products. (Exothermic)
- Incompatibles include strong oxidizing agents, and strong bases

Health Hazards:
- OSHA PEL: 150 ppm (TWA)
- IDLH: 1300 ppm
- Irritation to eyes, skin and respiratory system
- Inhalation of vapors may cause drowsiness and dizziness

Fire Fighting Measures:
- Extinguishing media: Appropriate foam, dry chemical, carbon dioxide, water fog
- Use of water spray may be inefficient
- Vapors may travel to a source of ignition and flash back
- Vapors are heavier than air and may spread along the ground and collect in low areas
- Use water spray to cool containers

2012 Emergency Response Guidebook:
- Shipping name: Isobutyl acetate
- Hazard Classes: Flammable Liquids (3)
- UN/NA: 1213; Guide # 129 Flammable Liquids (Polar/Water-Miscible/Noxious)
- Spill: Initially isolate 150 feet in all directions
- Tank, rail car, tank truck: isolate ½ mile

2010 Oregon Fire Code: Table 2703.1.1(1)
- Flammable liquid Class IB
- Maximum Allowable Quantities (MAQ) per control area:
- Unprotected by sprinklers or approved storage cabinets: 120 gallons
- In sprinklered building, not within approved storage cabinets: 240 gallons
- In unsprinklered building, within approved storage cabinets: 240 gallons
- In sprinklered building, within approved storage cabinets: 480 gallons
- Group when MAQ exceeded: H-2 or H-3

Incident Reporting and Information:
- Facilities reporting isobutyl acetate on the Hazardous Substance Information Survey: five
- Hazardous materials incidents reported in Oregon since 1986: None

References include:
- Cameo chemicals – Isobutyl acetate
- Acros Organics – MSDS Isobutyl acetate
- CDC Niosh Pocket Guide – Isobutyl acetate
- Sigma-Aldrich. – MSDS Isobutyl acetate (Click on link)
- EPA List of Lists, October 2012
- Eastman Chemical Co. – MSDS Isobutyl acetate

For questions or suggestions, contact Aleta Carte at 503-934-8262 or aleta.carte@state.or.us.

OSFM new employees

Mistie Kohlmeyer
Administrative Specialist
Fire & Life Safety Services

Mistie grew up in Dallas, OR, and graduated as valedictorian from Perrydale High School in 2004. She attended Chemeketa Community College and earned her general associate degree.

Before coming to OSFM, Mistie worked for 18 months in the Firearm unit for Oregon State Police.

Mistie has two wonderful sons who keep her running all the time. In her spare time she likes keeping busy with her boys and dog by going on hikes or spending time at parks; anything that keeps the family outside.

"I'm excited about joining the OSFM Team. I enjoy the job and the people I work with."

Amy Roach
Program Assistant
Fire & Life Safety Education

Amy grew up in Stayton, OR, later moving to Southern California, then Texas, before relocating to Oregon in 2011. Amy's background is in the mental health and medical fields, but she considers herself somewhat of a "Jill of all trades," having certificates and licenses in several fields of varied interests including her Oregon hairdresser's/barbering license, and a certificate in medical coding.

In her spare time, Amy enjoys spending time with friends and family, traveling, and playing with her dogs. She also enjoys playing cards, board games, and video games.

Amy has been with Oregon State Police for more than three years and is excited about her move to OSFM.

"I love helping others, and pride myself in providing good customer service. I want to be the type of person that people enjoy interacting and working with."

Victoria Sartain
Office Specialist II/Survey Processor
Community Right to Know

Victoria was born in Salem, OR, but spent several years of her childhood traveling abroad with her parents. By ten years of age, she had flown around the world and been to more countries than most people see in their lifetime. After serving as missionaries for three years in Rwanguba, Zaire, they settled in Independence, Oregon.

She graduated from Central High School in 1997, and moved to Phoenix, Arizona to continue her education in business administration. She returned to Salem in 1999. In 2000, she married and started a family.

Married to a soldier in the Oregon National Guard who served on several deployments, Victoria spent seven years working as a Family Program Coordinator for the National Guard. She assisted soldiers and their families before, during, and after deployments. She continues to volunteer with the National Guard State Family Program supporting families, organizing events, and researching resources for soldiers and their families.

Victoria is now a single mom of four beautiful daughters who are her pride and joy. After working in various industries in the private sector for a few years, she applied to the state and has since worked in several positions.

She has many hobbies and talents in the arts (drawing, painting, singing, dancing, and playing piano.) But her favorite thing to do on the weekends is to spend time at her barn with her Thoroughbred Gelding, Prince. She enjoys sharing her horse passion with her daughters, who are equally passionate.

"I truly feel blessed to be a part of OSFM. I hope my positive and "go get 'em" attitude will encourage those around me to live life to the fullest and never take things for granted because life is too short."