



July 2023 - VOLUME 1 - ISSUE 7

HOT TOPICS

The latest news and updates from the North Dakota State Fire Marshal's office



Fire Effects

This month Chief Deputy Kimberly Ersland writes about fire effects.

How many individual effects do you see in this picture? Answers on the last page.



BURNING NEWS FROM THE CHIEF DEPUTY

Kimberly Ersland



How do we conduct fire investigations? The typical answer you receive sounds something like from exterior to interior, from least to greatest, determination of area of origin, hypothesis development and cause determination. That is correct.

But what is missing from the answer is observation!

Methodology is important and you should have a systematic approach to your investigation. However, accurate investigations require observation. I want to visit specifically about observation of fire effects. Fire effects are defined as the observable or measurable changes in or on a material as a result of a fire (NFPA 921 Section 3.3.74). They are typically grouped into four categories: mass loss, deformation, discoloration and deposition. Having those four categories helps to identify how to document your fire effects. Begin by writing down your observation, as individual fire effects. These are facts and should be distinguishable by an average reader.

As you document the various materials that melted, charred, discolored and/or oxidized, you have a list of facts to start. When stated clearly and concisely, this list should not be arguable. One example might be two windows on the south wall of the living room. The window above the couch had charring to the bottom of the wood framing and the windowpanes were no longer intact. The window above the recliner had no charring, but did have smoke staining to intact panes. A person could look at a photograph and would agree that the observations were accurate.

Analysis of these small inarguable facts when put together lead to fire patterns. Our example only gives two simple effects, and you should

obviously have several more to form a pattern. Analyzing or making assumptions before identifying the fire effects can lead to inaccurate determinations and wrong conclusions. We would encourage you to consider that if we are looking for the 'big picture', we may miss key pieces of the puzzle.

To paraphrase NFPA 921 Section 6.1 and 6.2, observation provides facts. Facts lead to analysis. Analysis leads to opinion. Being able to observe and identify fire effects is a foundational skill in fire investigations.





ON THE ROAD WITH DEPUTY FIRE MARSHAL

Jess Sinerius — District 1



Welcome to July! Recently I have been catching up on assigned plan reviews for fire protection systems.

Under North Dakota Century Code 18-01-02 the State Fire Marshal may enforce all the laws of the state providing for installation and maintenance of automatic or other fire alarms and fire extinguishing equipment. The State Fire Marshal has adopted the International Fire Code, 2018 Edition through

Administrative Rule 10-07-01.

There are several types of protection systems but typically our office is responsible for reviewing commercial cooking hood suppression systems, automatic fire alarms and automatic sprinkler systems.

After a designer or contractor submits plans to our office, they are assigned to a Deputy State Fire Marshal for plan review to ensure minimum code requirements are met. The Deputy then corresponds with the submitter to answer any questions or clarify details. Upon completion of the project, the Deputy will attend the final witness testing to ensure the system was installed per the plans and is operational.

The following are examples of deficiencies our office has observed during final witness testing that had to be corrected before the project was accepted:

- Horn/strobes were not synchronized.
 - Required monitoring was not established.
 - Exterior horn/strobe not operating when sprinkler system was activated.
 - One of my recent favorites was a shade/curtain had been installed in a large glassed atrium in a manner that blocked the sprinkler head which could result in delayed activation or impeding water distribution.
- After witness testing, we complete a Fire Safety Inspection report detailing any deficiencies or correction needed. We do our best to include the local fire departments throughout the plan review process but please reach out to our office if you have any questions!





ADMINISTRATIVE ASSISTANT AREA

Marcy Ost



We're coming up on Certificate of Existence (CoE) season! HINT—if your incident reporting has gotten away from you now is a good time to catch up! ;)

The CoE program is fairly straight forward. For you it amounts to filling out an online form once a year triggering a check from the insurance tax distribution fund.

I realize this is a massive simplification and for lots of departments online reporting is easier said than done for a variety of reasons. Please know—we are here to help.

Here's what's going to happen:

On the first weekday of August we will send a letter via email announcing the system is open. It's worth noting it's always open for you to review and submit updates (new chief or changes in phone numbers or email address's).

We send detailed instructions about how to get in and what to do in case you've forgotten any passwords etc. According to NDCC there needs to be two signatures on the CoE submission so two people from your department or city need to have accounts in the CoE program. This part hangs a lot of folks up. They don't realize they need two different log ins. **Generally** one account holder is the Chief and one is the secretary/treasurer. Usually what we see is the secretary/treasurer goes in and enters the information and then the Chief goes in, reviews, "signs" and submits. BUT every department is different and what works for you may be different. You do you.

About login ID's — we can see who in your department has accounts and what your login is if you've lost track of that info. If this is your first year in this roll we will call and verify.

We will send reminders. Often, CoE closes October 31st and while it sounds like plenty of time to get it done it's a tough time of year and the days go FAST.

Again, we're here to help. Please don't beat your head against the wall. Call.

July Social Media Focuses

Fireworks: Leave them to the professionals

National Grilling Month

Suggested posts:

- ◆ The only safe way to view fireworks is by attending public displays.
- ◆ Place the grill a safe distance from lawn games, play areas, and foot traffic.

NFPA has:

- ⇒ A grilling safety tip sheet [here](#)
- ⇒ A grilling safety video [here](#)
- ⇒ Grilling safety social media cards [here](#)

Also happening in July:

- 2nd — National Wildland Firefighter Day
- 4th — Independence Day
- 15th — National Pet Fire Safety Day



FIRE DATA ASSISTANT ZONE

Lydia Citta



July is National Grilling month. Stressing safety while using a grill is important, especially when one is using the grill near a home or camper.

Keep the grill at least 3 feet from a structure to prevent fires. Fire is one concern when it comes to grilling, but another is injuries occurring while lighting the grill.

Reminding people to keep the lid open when lighting will decrease injury incidents. The graph compares fireworks and grilling incidents against each other and the year to the month. In July North Dakota had more grilling than fireworks incidents.

In 2022, North Dakota had 21 grill fires reported. Nine of those fires were in July.

The State Fire Marshal's Office can only accept fires reported in a manner that is compliant and compatible with the National Fire Incident Reporting System (NFIRS).

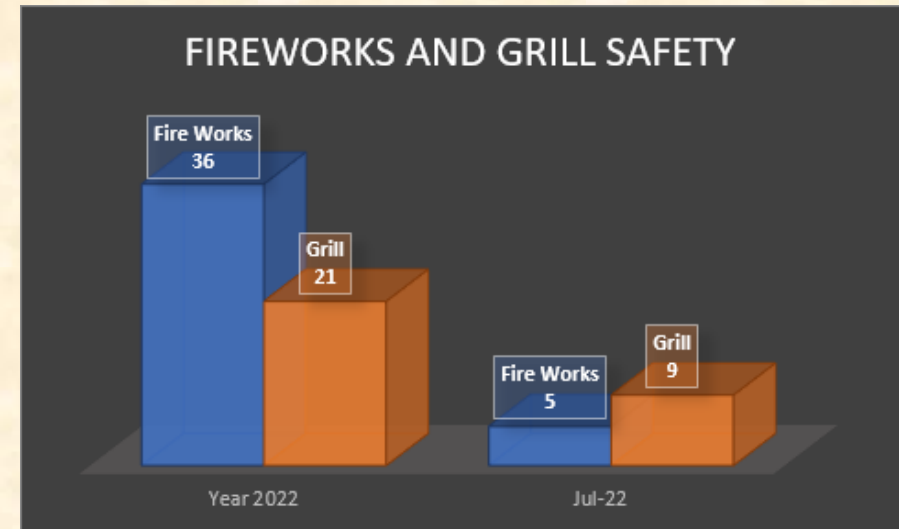
There are four options available to meet this:

- Report fires directly into eNFIRS
- Report using a third party software that is compatible and current with NFIRS
- Report using State (Department of Forestry) contract with Emergency Reporting (ER)
- Report using the NFIRS paper form (acceptable but does not get entered into state or federal database)

Our office will release submitted incident reports into the NFIRS Database monthly.

If you report fires directly into eNFIRS (<https://www.nfirs.fema.gov/NFIRSWeb/login>)

For questions or support for ER (844)253-9337 or support@emergencyreporting.com.



Are Sparklers really safe?

- Sparklers burn at up to **1,800°**
- Aluminum melts at **1,200°**
- Glass melts at **900°**
- Paper ignites at **450°**
- Cakes bake at **350°**
- Matches burn at **325°**



APPRECIATION FOR THE INSURANCE DEPARTMENT

This year's North Dakota Firefighter's Association (NDFA) Convention was held in Medora June 2-3. During the general session the NDFA and the ND Fire Chiefs Association (NDFCA) presented members of the Insurance Department gifts of appreciation for all the work the Insurance Department invested in the fire service during the 2023 session. Chief Ken Wangen, NDFCA president, provides the following explanation of the sign (derived from Fully Involved Leadership by Capt. Mark vonAppen):

As a group: In the background "The Big 4" of the Fire Service Standards of Performance. 1) Do your job, 2) Treat people right, 3) Give all-out effort, 4) Have an all in attitude.

As a Leader: Connect the Dots— passion, purpose, progress and patience.

Start Here: The bottom is starting point of anything.

2200 F: Melting point of metal where it becomes malleable and can be formed. As a person allow yourself to learn and mold towards improvement.

FULLY INVOLVED: This is a term used by firefighters to describe conditions upon arrival of a fire that indicates the fire has complete control of the structure. It is a raging inferno that leaves no doubt about its intentions. For fire fighters it means, face the flames.

Arrow pointing up: The direction you wish to go and level you wish to obtain. Do the steps listed above and you will succeed.

This perfectly described the 68th Legislative Session and how our goals were met as a unified group.



Insurance Commissioner Jon Godfread, Administrative Division Director Rachel Kriege and Deputy Commissioner John Arnold



MONTHLY REPORTING INSTRUCTIONS

If you report fires directly into eNFIRS

Ensure reports are entered, complete and submitted.

In eNFIRS this means to SAVE a lot and make sure that your incident page says “successful” once complete and saved.

If no fires or incidents occurred in the previous month, please enter a “no activity report” by completing the following steps:

In eNFIRS, click on the “Incidents” Tab

Click “Create Incident” from the dropdown menu

Check/mark the “No Activity” box

Fill both the incident number and exposure fields with zeros.

The incident date field should be the last day of the month of no activity.

SAVE the incident

Now your department/District will count as actively reporting even though no incidents occurred.

If you report using a third party software compatible with NFIRS:

Ensure your reports are entered, complete and submitted.

Submit your incidents to nfirs@nd.gov in a .txt file that can be imported into eNFIRS.

We will report back to you with any discrepancies or notification of successfully completed import.

*FEMA releases NFIRS updates every year in October. It is a good idea to contact your third party software and make sure they are compliant with NFIRS updates.

If you report using the State provided contract with Emergency Reporting:

Ensure your reports are entered, complete and “reviewed” (i.e. the “Lock” Logo is GREEN). If not reviewed, they cannot be released to the SFM’s Office or imported into eNFIRS.

In Emergency Reporting, you MUST ensure that the “Lock” Logo is GREEN in order for your incident to be complete and available for our office to export.

• If reporting fires using the NFIRS paper form:

(acceptable but does not get entered into state or federal database)

Ensure all required modules on report are complete and legible.

Required modules for all fires include:

Basic Module

Fire Module (Wildland Module may be used with this for applicable fires)

Structure Fire Module

Civilian Fire Casualty Module

Fire Service Casualty Module

Mail or email completed paper forms to the State Fire Marshal’s Office.

Paper reports submitted without all required incident information will not be accepted.

For any questions on this process, reporting of fire incidents, or eNFIRS user account assistance, please contact the State Fire Marshal’s Office.

RESOURCES

Links from this issue:

North Dakota Career Openings <https://www.omb.nd.gov/team-nd-careers/career-openings>

North Dakota Firefighters Association <https://apps.nd.gov/NDFA/Members>

North Dakota Century Code 18-04 <https://ndlegis.gov/cencode/t18c04.pdf#nameddest=18-04-01>

NFPA grilling safety tip sheet https://www.nfpa.org/-/media/Files/Public-Education/Resources/Safety-tip-sheets/Grilling_safety_Tips.pdf

NFPA grilling safety video <https://www.youtube.com/watch?v=-AYBZzLDO04>

NFPA grilling social media cards <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Seasonal-fire-causes/Grilling/Grilling-social-media-posts>

Grilling Safety Fast Fact

July is the peak month for grill fires, followed by May, June and August.



NATIONAL FIRE PROTECTION ASSOCIATION
The leading information and knowledge resource on fire, electrical and related hazards

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Grilling Safety Fast Fact

In roughly 1 of every 5 grill fires, grills have not been cleaned.

To prevent fires, keep grills clean.



NATIONAL FIRE PROTECTION ASSOCIATION
The leading information and knowledge resource on fire, electrical and related hazards



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Smoke staining to windowpanes
(Discoloration)

Soot deposits on walls
(Deposition)

Plastic on front
of window air
conditioner
melted.
(Deformation)



Thermal
expansion
and/or melting
on face of
speaker
(Deformation)

Mass loss of foam and
material on cushion
(Mass Loss)

Charring to left
side of dresser
(Mass Loss)

Charring to trim in corner
(Mass Loss)