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Safety & Health Awareness Committee

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Playing with Fire: How to Stay Safe on the Jobsite

As we celebrate America as a nation this July, fireworks, whether in person or virtual, are always part of the festivities. Many communities have banned fireworks due to high fire danger, but if you are fortunate enough to still enjoy live fireworks, you will notice the multitude of safety precautions being taken at the site. Fire is also a threat to construction jobsites. The primary fire threats on construction sites are fuel hazards and ignition dangers. Fuel hazards include combustible building materials (particularly temporary components), flammable liquids and gasses, and waste materials. Ignition dangers include electrical faults, hot work, smoking on the jobsite, lighting, and portable heaters.

If you have been reading my articles for the past couple of years, you will know that I am a big fan of the Hierarchy of Controls to control construction hazards. Following the Hierarchy of Controls, the most effective control to prevent fire is **elimination** of the hazard all together. On a construction jobsite, unnecessary combustible materials should be kept off the jobsite. All electrical components must be installed and/or operated by qualified electricians to **eliminate** the possibility of ignition from substandard work. Electrical components should be inspected regularly so loose wires and damaged cords can also be **eliminated**.



When elimination of a fire hazard is not possible, every effort should be made to **substitute** materials that are fire-rated (as near to Class A or Class 1 as possible), and/or fire resistant. Choosing fire-resistant building materials is always more important than choosing the cheapest option.

Engineering controls should be put in place when elimination and substitution are not possible. Fire alarm systems along with fire extinguishers and fire blankets available on the job site can help stop a fire before it becomes catastrophic. It is important to note that different fire extinguishers are required for different types of fires. Everyone working in an area where fire is even a remote possibility should have the appropriate fire extinguishers available and should be trained in how to use them. Another **engineering control** is having an appropriate number of emergency exits that are clearly marked to allow onsite workers to leave the site quickly and safely in the event of a fire.

Administrative controls, while not as effective as the preceding controls, are still very important. Including toolbox talks and other training of possible fuel hazards and ignition dangers on the jobsite can make workers aware of dangers they may not have seen otherwise. Risk assessments and job walks are also excellent ways to detect fire dangers before they occur.

Finally, personal protective equipment (**PPE**) used must be appropriate to the tasks of each worker. Welders and electricians, for example, should wear clothing specifically designed for their tasks. All workers should consider their clothing style and material as well as their hand, foot, eye, head, ear, and face protection. PPE should be flame resistant or fire retardant as appropriate.

By following the Hierarchy of Controls, fire danger on a construction site can be eliminated all together or, at the very least controlled, to prevent injuries and keep workers safe. You can find more information about fire safety on the construction jobsite here: <u>https://www.cdc.gov/niosh/docs/2004-101/chklists/n70con~1.htm</u>.



Karen Mitchell, CBT, CIS, CIT, National NAWIC Safety & Health Awareness Committee Chair <u>NAWIC Safety@outlook.com</u> A 719-651-2824