Complete Health Environmental and Safety Services

CHESS, Inc. 33 E. Wentworth Ave., Suite 320 West St. Paul, MN 55118 Ph.: 651-481-9787

www.chess-safety.com

A garage burned down...

By Janet L. Keyes, MS, CIH and Carol A. Keyes, MA, CSP, CRC

A mechanical shop in north Minneapolis started January on a bad note – it burned in spectacular fashion, resulting in a total loss. The cause: reportedly a gasoline leak ignited by a spark. Just a week later, two men tried to remove a gasoline tank from a car parked next to a house. They caused a spark; the house burned down.

Too often we forget how very flammable gasoline is, how readily fires can start, and how much fuel is in our shops. The fire hazard isn't only from the gasoline in vehicles. The cylinder of acetylene you tuck away under the stairs, the 55-gallon drum of waste thinner left near the garage door until your hazardous waste hauler arrives, the LP tank you stash behind the spray booth, waiting for grilling weather – all of those are the fuel for the fire. Add a spark, from welding, grinding, using a saw, or from electrical equipment, and your shop might look like the north Minneapolis one, a pile of ashes.

Our buildings are built today with the intent of preventing fires from starting and of limiting the spread of a fire once it has started. But some of you have older shops, built before sprinklers were mandatory. Some of you installed spray booths, but didn't arrange to have a sprinkler company put in fire suppression. And some of you may be oblivious to the hazards.

So what can you do to prevent your building from blazing?

Know your sources of risk. Walk through your shop, and look at what flammable liquids and gases you have. This doesn't have to be a formal inventory. But you do want to have an idea of what could cause a fire. Not sure if something is flammable? Look for the flame pictogram or DOT placard. Any liquid or gas bearing this will be a fire risk.

Look at where your flammables are. You never want them stored in the path to an exit – a drum or cylinder blowing up from the heat of a fire, right in the exit path, is a really bad way to encourage people to leave quickly. Are the materials near heat sources? Not good. Next to the grinder? Move them.



The best place to store flammable liquids and aerosol cans is in a flammable liquids storage cabinet or an inside storage room, designed specifically for that purpose. But that's not mandatory if the amount is relatively small. Even if not required, keeping those flammables in a place that will slow down a fire is a good idea.

Take the same care with storage of your flammable gases. What's wrong with the acetylene under the stairs? That's an exit route from the rooms at the top of the stairs. Keep the cylinders

chained, and if they're equipped with safety caps, leave those in place. Store them away from heat sources and away from oxygen.

Brief your employees about the hazards of mixing flammables and heat. They need to be aware of the hazards from the work they do, such as welding. But they also need to be aware of the hazards caused by winter's cold. At this time of year, space heaters, unit heaters, and furnaces are working hard; remind employees that they must not store anything combustible near those.

Keep your shop cleaned up, as that reduces the amount of fuel. It also can decrease the amount of combustible dust in the shop. As body techs have observed, body filler burns. When you sand it off, it goes somewhere. If it lands on beams and unused surfaces, it will add fuel to any fire.

Clean up spills right away. That goes along with keeping a tidy shop – you're more likely to detect a spill if you can see the container.

If a fire starts in an automotive repair facility, the building can become an inferno before the fire department can arrive on the scene. If your building is protected by a sprinkler system, it won't be a total loss after a fire. But at a minimum, you'll have to deal with smoke and water damage, even if the sprinkler system activated quickly. Preventing fires is much more cost effective.

If you have questions about fire safety, fire prevention, chemical safety, or general safety issues, call CHESS at 651-481-9787 or e-mail us at CHESS@chess-safety.com

This article is intended to provide general information (no advice) about current safety topics. To discuss your specific concerns and how CHESS may help, please contact CHESS at 651-481-9787 or chess@chess-safety.com

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