

Case Study - Property Coverage Dryer Lint Fires

Project Description: Residential Fire Restoration/Soot Cleanup

AET's Experience: The majority of dryer fires are the result of lint build-up inside the dryer or inside the pipe that vents the dryer to the outside. Lint is very

flammable and can smolder inside the dryer or vent pipe long after the dryer is turned off. A poorly maintained dryer extends drying time and wastes money as it consumes electricity and/or natural gas. Dryers forced to run too often can damage sensors designed to protect the dryer from overheating. The US Fire Administration estimates that there are 2900 dryer fires in residential US buildings each year, resulting in 5 deaths and over \$35million in property damage. Dryer fires are preventable and proper operation/maintenance saves lives.

Seven Dryer Fire Prevention Tips:

- 1. Never leave the dryer running when you are away from home or while you are sleeping.
- 2. Clean the dryer lint screen with each use.
- 3. Clean the dryer vent pipe at least 2 times per year. A shop type vacuum can be used to vacuum out dust accumulation or a leaf blower can be used to blow excessive lint accumulations within the pipe to the outdoors.
- 4. Frequently vacuum clean dust accumulations behind the dryer.
- 5. The dryer duct inside the walls should be made of solid metallic material. Vinyl or foil duct connections are combustible, tend to accumulate lint more readily, and will burn through allowing the fire to spread into the home.
- 6. All vent connections should be as short as possible and without bends. Avoid kinking or crushing the dryer duct.
- 7. Always vent the dryer to the outdoors; never vent the dryer into the attic or crawl space.

Restoration Requirements-Soot Cleaning: Air currents created by fires can easily disseminate smoke, soot and odors throughout the home. Soot is also hydrophobic (it repels water) and wet cleaning of soot contaminated surfaces can result in smearing and staining.

Cleaning must be performed after the restoration work area is placed under negative pressure (vented with HEPA filtration units-AFDs) to prevent soot from spreading further. Soot removal should be performed by first HEPA vacuuming the affected surfaces. Chemical dry cleaning sponges should then be used. Cleaning should also start at the furthest point from the air filtration units and work towards the AFD's; and commence from the ceiling level (top) and working downward.

Conclusion: Fire restoration should be performed in accordance with a written/approved work plan by an experienced environmental professional. The work plan must detail building materials and contents to be discarded or cleaned and the specific methods of cleaning which will be implemented along with the acceptance of cleaning to be achieved before re-occupancy. The work plan must also evaluate the residence's HVAC system and residual odors; questions regarding soot contamination in the HVAC can be evaluated by surface sampling followed by microscopic analysis.

When you need professional help or advice, email Alan Sutherland, CIH, CHMM at <u>a.sutherland@aetinc.biz</u> or call 610-891-0114. We provide nationwide services; phone consultations are free. Check out the full range of environmental contracting/consulting services we provide at our website <u>www.aetinc.biz</u>.