Spontaneous Combustion: Help Keep This Serious Fire Hazard from Happening to Your Home

What is Spontaneous Combustion?

The actual definition is “the outbreak of fire without application of heat from an external source”. This combustion most often occurs when a flammable material (oil, stain, gasoline or other solvents) comes into contact with a combustible object (rag, towel, or drop cloth).

Spontaneous combustion, sometimes referred to as spontaneous ignition, begins when a combustible object is heated to its ignition temperature by a slow oxidation process. Oxidation is a chemical reaction involving the oxygen in the air around us gradually raising the inside temperature of something (like a pile of rags) to the point at which a fire starts.

Spontaneous combustion happens more than you would think and causes major fire losses each year. One of the most common scenarios is when floors, woodwork or decking are being refinished and stain-soaked rags are left in a heap on the floor or deck. Simply not storing these rags properly can cause major fire damage. The warmer the weather, the quicker the rags can reach ignition temperature.

Common Offenders*:

- Linseed oil and other drying oils
- Wood Stain
- Alkyd Enamel Resins
- Motor Fuels
- Oil-based products such as primer, sealer, paint, White-Pigmented Shellac, paint thinner, turpentine, mineral spirits and denatured alcohol.

*Read and follow the safety precautions listed on the container of any solvent-based material

How to Avoid a Disaster in Your Home

1. **DO NOT** ball up, pile, stack or fold any wiping cloth, rag, towel, drop cloth, steel wool or piece of work clothing that becomes moistened or wet due to contact with a solvent-based material.

2. **DO NOT** toss used rags into a trash can or plastic bucket.

3. **SAFELY STORE** any garage/workshop supplies. Paints and solvents should not be kept near heat generating equipment such as cars, furnaces or water heaters.

*Solvent-moistened or wet wiping cloths, rags, towels, drop cloths, steel wool, brushes, protective coverings and work clothes should be handled as follows:*

- Immerse item(s) in water in a metal container and seal with an air tight lid.
- After soaking in water, allow item(s) to fully air dry by laying FLAT on a non-combustible surface. (Be sure to air dry safely away from any buildings or other combustible items.)
- Once air dry, the item can be safely stored or discarded.

For safe disposal information, contact your local Solid Waste Authority.

This information is advisory in nature. No liability is assumed by reason of the information in this document.