Preventing Spontaneous Combustion of Oil Soaked Rags

The most common type of Spontaneous Combustion fires are those caused by improperly disposed of oil and stain soaked rags. Examples of these products are oil-based paints and stains, teak and linseed oils, varnishes and polyurethane, paint thinners, etc. Spontaneous combustion of oily rags occurs when rag or cloth is slowly heated to its ignition point through oxidation. A substance will begin to release heat as it oxidizes. If this heat has no way to escape, like in a pile, the temperature will raise to a level high enough to ignite the oil and ignite the rag or cloth. The fire from this can spread quickly to other combustibles and cause great damage to your home or property.

Prevention of spontaneous combustion fires begins with good housekeeping. A clean work area can prevent a fire from spreading and getting bigger by not allowing the fire fuel to burn. Also understanding the potential for self-heating of rags soiled with oils such as linseed oil and turpentine is a key step in eliminating these preventable fires.

To properly and safely dispose of oily rags, Bend Fire Department recommends the following steps:

- Use a container with a tight fitting lid. A metal can is preferable but a plastic can or zip lock bag can work if nothing else is available.
- Place soiled and used rags inside and then fill the rest the way with water, seal the top and do not open it. This will prevent the oils from oxidizing, and thus keeping the rags from heating up and igniting.
- Contact your local garbage disposal company for their policy on disposal of the can and contents. Some companies will permit disposal in regular household trash.