



## SOUTH AUSTRALIAN METROPOLITAN FIRE SERVICE

### HOME FIRE SAFETY INFORMATION

For further advice contact the Community Safety Department  
South Australian Metropolitan Fire Service on 8204 3611



# THEORY OF EXTINGUISHING A FIRE

A fire will continue to burn as long as there is **FUEL**, **OXYGEN** and **HEAT** available. Fire extinguishment is achieved by the removal of either the FUEL, OXYGEN or HEAT or by the interruption of the chemical chain reaction. This is achieved by:

#### **STARVING**

Removal of the unburnt material  
*This includes turning off the gas*

#### **SMOTHERING**

Preventing the oxygen (air) from combining with the fuel  
*This is how a fire blanket works*

#### **COOLING**

Reducing the temperature of the burning material to below its ignition point.  
*Adding water to a Class A (solid combustible) fire does this*

#### **INTERRUPTION OF THE CHAIN REACTION**

*Some extinguishing mediums (eg. Dry chemical powder) accomplish this action and at the same time smother the fire*

**For Greater Detail On The Theories Of Fire And Its Extinguishment See:  
'THEORIES OF FIRE & FIRE EXTINGUISHMENT'**

For further advice ring the Community Safety Department 8204 3611  
Country callers 1300 737 637  
e-mail [communitysafety@samfs.sa.gov.au](mailto:communitysafety@samfs.sa.gov.au)  
visit our website [www.mfs.sa.gov.au](http://www.mfs.sa.gov.au)  
or call in to 99 Wakefield Street, Adelaide during business hours.