

EXPLOSIVES HAZARDS

Fact Sheet No 3: Basic Fire Prevention

The prevention of the accidental ignition of explosives is critical to ensuring the health and safety of employees, contractors and the general public.

Each storage and manufacturing operation should have a Risk Assessment. A Risk Assessment is a systematic analysis of an activity that assesses the hazards and the likelihood of an accident. The Risk Assessment also defines the preventative and protective measures required to ensure health and safety.

For activities involving explosives storage or manufacture the risk assessment examines the likely sources of ignition, the consequences of a fire, and defines the preventative and protective measures required to minimise the risk of a fire or explosion.

There are a number of general preventative measures that are common to all activities involving explosives that are aimed at basic fire prevention:

Special Rules and Site Rules:

These rules identify specific measures to prevent sources of ignition coming into contact with explosives, by prohibiting certain materials and substances from workplaces, for example matches, lighters, cigarettes, fuels, etc.

The rules also specify other restrictions or prohibitions that are aimed at preventing foreign bodies or incompatible materials from coming into contact with explosives, which could impact on the safety of the explosive increasing the risk of fire, or provide a source of ignition.

Written Safe Systems of Work:

These documents come in a number of forms; they can generally be classified either as a manufacturing instruction, a maintenance instruction, a permit to work, or a method statement. They describe the procedures for an activity or task that are to be followed to ensure the safety of that activity or task.

Cleanliness and Housekeeping:

Workplace cleanliness is important to prevent the build up of explosives waste and dust, and to protect explosives that can be adversely affected through contamination by grit, or chemicals.

Good general housekeeping is also essential to ensure that only the correct and specified tools and equipment are used, that the amount of explosives, and in particular the amount of exposed explosives are minimised, and that walkways and exits are clear and unobstructed.

These general preventative measures are designed to reduce the risk of ignition of explosives and to maximise the time for people to escape in the unlikely event of a fire. Compliance with the rules and procedures, and the maintenance of high standards of cleanliness and housekeeping are essential to basic fire prevention.