



ACCIDENT/INCIDENT ALERT

No. 8, February 2006

Blasting powder ignited by sparks from an angle grinder caused serious burns to farmer and worker

This serious accident highlights the need for farmers to take an inventory of their workshops and remove and store hazardous substances safely in separate, locked and well-ventilated storage areas.

The accident

Due to bad weather, the farmer and his casual employee were carrying out repairs to a docking cradle in the farm workshop.

The work involved cutting rectangular hollow section steel (RHS) with an angle grinder.

The employee held the RHS while the farmer made the cut with the angle grinder.

Close to where they worked and against one wall, was a boxed shelf with twenty separate compartments. Each compartment contained a variety of items.

Blasting powder was contained in the bottom centre compartment at floor level.

As the cutting was nearing completion, sparks ignited the blasting powder resulting in an explosion.

Serious harm occurred to both men, in particular the farm employee.

The farmer had thought the blasting powder had been removed some 15-20 years previously. Afterwards he estimated that it had been in the shed for at least 40 years.

The cause

A spark or sparks from the angle grinder igniting blasting powder stored in the workshop.

Prevention

In order to prevent a similar occurrence there are some precautions that need to be followed:

- Carry out an inventory of items in a farm workshop.
- Identify materials and determine those that are hazardous or could become hazardous depending on the work that might be required in the vicinity.
- Safely dispose of unwanted hazardous material.
- Store hazardous materials under lock and key and separate from work areas. Where the substance is covered under the Hazardous Substances and New Organisms Act 1996 then specific storage requirements may apply (i.e. explosives, petrol, pesticides etc.
- Only carry out tasks such as welding or grinding in a clear area and away from any likely sources of ignition.
- Always have a fire extinguisher on hand when carrying out such tasks.

- Ensure emergency procedures are in place and understood by those involved.

Legal Obligations

The Health and Safety in Employment Act 1992 places responsibilities on employers, employees, people who hire contractors and others.

Under the law, if you are an employer then you must take all practicable steps to:

- Ensure you and your employees are safe while at work;
- Identify all hazards in a place of work; and
- Where the hazards identified are significant – firstly eliminate the hazard where it is practicable to do so, if not practicable then isolate the hazard, again if that is not practicable, minimise the hazard.

You must involve your employees in the identification and management of hazards, and provide them with protective clothing

and equipment to protect against significant hazards that cannot be eliminated or isolated. An employer is also required to provide training, supervision and information to employees on matters likely to affect their health and safety.

An employee must not do anything at work that is likely to cause harm to themselves or others.

Safety Information

Publications to assist with the management of health and safety can be found at:

www.dol.govt.nz

Select the Health and Safety site and then select "Publications". Scroll down to find and select specific information.

Alternatively phone 0800 20 90 20.

Information on specific controls covering hazardous substances can be found at:

www.ermanz.govt.nz