

## **Electrical and Gas safety on Farms**

As well as being aware of the OHPL on your farm there are other precautions you should be aware of when working with electricity.

There are many near misses with electrical equipment, which could have resulted in a serious electrical shock and a fatal injury. Many involve use of poorly maintained portable electrical equipment, faults in machinery and damaged extension cables. Poor electrical installations can result in fires.

On your farm make yourself familiar with: -

- The electrical isolation switch for the building
- The cut off switch for any piece of fixed machinery in use so that it can be isolated quickly in an emergency. Label up to help quick identification.
- The farmer should arrange for regular inspection and testing of the fixed electrical equipment and any portable electrical equipment.

There are precautions you can take to help you use electrical equipment safely.

- Check that power cables to machines are suitably protected e.g. armored cable and covered in thick flexible material such as rubber.
- Socket outlets outdoors and in damp environments such as a Dairy should be suitable for this environment and protected with a Residual current device (RCD) that quickly trips if there is a fault. Sockets in these environments should not be domestic type sockets.
- Sockets with RCD's are particularly important when using pressure washers/steam cleaners.
- Wiring should be protected from risk of mechanical damage or damage from rodents by using conduit.
- Before using any portable electrical equipment including extension leads get into the habit of checking cables and plugs for any signs of damage, exposed wiring or scorching around pins.
- Take out of use immediately any damaged equipment, which provides a risk of electrical shock or fire.
- Don't overload sockets and avoid use of multi adapters as these can over heat.

## **Battery Charging - Electrical precautions**

To avoid electrical shocks when carrying out battery charging remember the following: -

- Switch the charger off before connecting or disconnecting the battery to it.
- Use insulated tools
- Don't place tools or conductive items on top of the battery
- Remember to remove any metallic items on hands and wrists such as rings to reduce the risk of a short circuit
- Always disconnect the earthed terminal first



Battery charging operations can provide a risk of explosion because of the flammable hydrogen gas that is given off.

- Set up your battery charging space in an area of good general ventilation
- Display warning signs – No Naked Lights, No Smoking
- Keep any electrical equipment or other sources of ignition e.g. sparks from equipment away from the battery area
- Make sure the battery level is regular topped up
- Ensure that the connections are secure before switching on.

### **Gas Safety /LPG**

Identify if there is any bulk LPG at your farm and be aware of its location and any above ground pipework. No smoking signs should be displayed.

The bulk tank should be in a secure area away from any vehicle movements where there is a risk of accidental damage. Any above ground pipework from the tank to the point of use should also be protected against accidental damage.

Be aware of underground pipework and don't put up any posts or poles close to the installation.

The area around the tank should be kept clear of combustibles such as rubbish, leaves and grass and shrubs should be cut down.

The UK LPG website has lots of guidance for safe use of LPG including inspection, maintenance, guidance for use in Caravans, use of small cylinders etc.

See links

<http://www.uklpg.org/uploads/DOC4D42E7CC3234B.pdf>

<http://www.uklpg.org/uploads/DOC4D42E80F5969C.pdf>

<http://www.uklpg.org/uploads/DOC52F9010872343.pdf>