

# Health and Safety

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There were no RIDDOR-reportable incidents during this year although there was one near-miss incident which could have had serious consequences. The hydraulic system of the wheels-free component of the garage vehicle lift was being bled when the bleed screw fell out, causing instant loss of pressure and collapse of the apparatus, narrowly missing the operator's hand. The provision of independent support for the component during bleeding has been written in to the risk assessment for this operation.

Working with extremely long and lightweight irrigation pipes beneath overhead high voltage power lines was recognized as a significant electrocution hazard to farm staff. Loading or unloading a pipe trailer is particularly hazardous as the trailer bed is raised several feet from the ground, so that the pipes are being manoeuvred that much closer to the cables. The pipes are so light, being made of highly conductive aluminium, that one man can hold a small-diameter nine-metre-long pipe in each hand. With the cables only 6.8 metres above the ground there was a danger that a person could absent-mindedly tip a pipe so that one end came close to the cables and caused an electric discharge resulting in death or injury. As a result of the risk assessment non-conductive plastic pipes were purchased for that part of the irrigation which was within a zone from the line of the cables out to six metres to one side (a roadway being on the other side).

In accordance with new Control of Substances Hazardous to Health regulations, wearers of respiratory protective equipment (RPE) at the Institute have undergone face-fit testing. The tests were carried out by a commercial company using a

Portacount Fit Test meter. This counts the number of particles of a harmless test chemical inside and outside the mask that is being worn. The ratio between the counts outside and inside the mask must be above a threshold minimum before it can be concluded that a good fit has been achieved. The most efficient mask is identified for each operator. The test was combined with a training session on routine inspection and maintenance of RPE.

A noise survey of the joiner's workshop showed that noise levels varied from an  $L_{Aeq}$  of 73.8 (maximum dB(A) = 74.2) for the quietest machine in use (a Startrite bandsaw) to an  $L_{Aeq}$  of 100.4 (maximum dB(A) = 110.0) for the noisiest (a Dewalt cross-cut saw). Most of the equipment is used in very short bursts. Measurements were carried out on the machine which was used for the longest periods (about two hours at a time), namely the Wadkin Bursgreen table circular saw. This gave an  $L_{EP,d}$  of 86.2 dB A. It was confirmed that the ear defenders used by the joiners, giving attenuation of 30.3dB, gave sufficient noise protection throughout the workshop.

The HSE carried out an audit of first-aid training which is provided by in-house trainers Heather Ross and James Anderson. The audit found that the training met the required standards in all respects.

A survey of traffic on the site has been carried out by a specialist consultant. His recommendations for changing the traffic flow in order to minimize vehicle-pedestrian interaction are in the process of being implemented.