INCIDENT ALERT

LOCATION:	Quarry	**ALERT STATUS:**	Normal
ACTIVITY:	Production and Processing	**DATE ISSUED:**	21/01/09
SUB ACTIVITY:	Face activity	**INCIDENT No:**	00200

TITLE

Augur isolation failure on Explosives mixer truck

ACCIDENT / INCIDENT DETAILS

The Health and Safety Executive was recently informed of a serious accident which occurred while an operator was working on a Mobile Explosives Manufacturing Unit. The operator sustained serious hand injuries while clearing a blockage in an auger feed device. The circumstances have prompted HSE to issue the following safety advice to companies that operate Manufacturing Units equipped with auger feed devices.

An operator was filling his Mobile Explosives Manufacturing Unit (MEMU) with emulsion phase (EP) from an external tank, using an external Bowie pump. The pump was driven by the auxiliary hydraulic system of the vehicle, which requires the engine of the vehicle, on which the MEMU is installed, to be switched on, and a power take-off shaft to be engaged. The hydraulic fluid was diverted to drive the external pump via a 2-position valve. In this configuration the auger feed device of the Unit should not function. Whilst filling was taking place, the operator was clearing solid material from the vertical auger feed of the MEMU. This had accumulated and caused a blockage in the feed of the solid constituent. While the operator was attempting to free the blockage, the auger started to turn, causing serious injury.

ACCIDENT / INCIDENT IMAGES

LEARNING POINTS / ACTIONS TAKEN

HSE recommends the following action:

Employers should apply a hierarchy of protection measures, where practicable, to the auger systems, as follows:

a. Fixed enclosed guards.

b. Other guards or protection devices, such as interlocked guards, which shut off the drive mechanism if the guard is removed/opened.

Employers should also ensure the provision of such information, instruction, training and supervision as is necessary. Access should only be gained after applying a suitable lock-off procedure/safe system of work. They should also ensure that any valves in the hydraulic system, used to drive the augers, are suitable for their intended purpose and are maintained to ensure proper functioning. If they are used to divert hydraulic fluid to drive different parts of the machinery, ideally, they should be of a three position type with centre blocking to prevent the potential splitting of pressurised hydraulic fluid. Employers should have systems in place to ensure that all guards and associated safety devices on MEMUs are regularly checked for defects; that any defects found are rectified; or that the MEMU taken out of use pending rectification.

LEARNING POINTS / ACTIONS IMAGES