

HEALTH & SAFETY EXECUTIVE POSITION STATEMENT

CARBON MONOXIDE

Received on email by British Drilling Association on 14th May 2007 from Marcus O'Connor, HM Inspector of Health and Safety.

“The following document clarifies HSE’s position on the subject of all drilling and remediation works taking place over land that may contain coal measures, a problem that has resulted in fatal incidents and carbon monoxide (CO) poisonings in recent years. Although the precise details of how CO is produced have not yet been fully defined, HSE understands that the introduction of air into the measures, both in order to ‘flush’ and by keeping boreholes open, are factors in the creation of and/or movement of carbon monoxide.

The risk of CO production and/or movement is not present in all coal measures. An assessment of the likelihood of coal seams being present within the measure, whether worked or not, should be undertaken. The assessment should include determining the type of coal present and the size of the seam or working, as these will both be factors in determining the level of risk for CO creation and /or movement.

Research is currently being undertaken by the Coal Authority which will result in guidance to the industry on the necessary level of precautions to take. HSE will comment on this document when it is completed. In the interim, arrangements should be made by companies who are undertaking work in this area. HSE advocates that, due to the serious nature of the risk and the potential for multiple fatalities to arise from work of this type, that companies adopt precautionary principles to ensure that the work is safely undertaken.

The Management of Health and Safety at Work Regulations 1992 outline the principles of controlling the risk on a hierarchical basis. The first two methods of control in this hierarchy are elimination and substitution. HSE accepts that this work is sometimes necessary and therefore cannot always be eliminated. Alternatives to air flushing such as water, are already commonly in use. **Water flushing should be the primary flushing method for work of this kind in the vicinity of coal measures and a risk of creating and/or moving carbon monoxide has been identified.** It is only where this is not reasonably practicable that other control measures for monitoring and controlling the risk may be considered. These would include gas detectors on rigs, perimeter detectors and monitoring within premises (including domestic premises) that could be affected by the works. Additionally a large time gap between first drilling into coal measures and final completion of the work is thought to contribute to the development of CO. Work should be organised to avoid long periods between start of the work and completion.

It is on this basis that HSE requires that a robust risk assessment is made for all remediation and drilling works over coal measures, outlining precisely what steps are being taken to control the risk to persons who may be affected by the work.”