

DGMS (Tech)/Circular No.3

Dated Dhanbad, the 6th March, 2003.

To

Owners, Agents and Managers of all Coal Mines.

Sub: Safe use of Fluid Coupling in underground coal mines.

A large number of fluid couplings are in use at underground coal mines used for transmission of power in conveyors and other machineries.

It has been brought to my notice that still large number of such fluid couplings in use are made of Aluminium working with Mineral Oil.

There is already a directive that alloys and metals likely to give incendive sparking shall not be used in construction of any underground machinery.

Full iron casting body fluid couplings are now available in the country which can work with either plain water or with 5% Emulsion Type Fire Resistant Hydraulic Fluid as per BIS 10532 Part – I. Such full iron casting body fluid couplings are being used for a long time in coal mines of England and Australia.

Therefore, in the interest of safety, to avoid fire from fluid couplings, all Aluminium body fluid couplings may be replaced by full iron body fluid couplings with Water or 5% Emulsion as mentioned above.

(Ravindra Sharma)
Director-General of Mines Safety.