

To
Owner, Agents & Managers of Oil Mines.

Subject: Precautions to be taken in oil mines during work-over/drilling operations.

Sir,

Recently, there was an explosion followed by fire at the mud tank and mud pump, driven by an internal combustion engine fitted on the same skid mounted chassis, during work-over operations at an oil mine.

Investigation into the accident revealed that, though an exhaust conditioner was provided, the explosion & fire were primarily caused due to contact of accumulated flammable vapours near the internal combustion engine with its un-shield hot exhaust pipe.

Thus, in order to prevent such incidences of fire & explosion, following measures are suggested to be taken at all drilling/work-over rigs:-

1. Internal combustion engines, with or without exhaust conditioner shall be located at such a distance from the mud tank that there may not be any presence of the flammable vapours/gasses around the same.
2. Suitable arrangements for regular monitoring of flammable gases/vapours shall be provided where an internal combustion engine is required to operate and whenever presence of flammable gases/vapours are observed to be 1.5% or more such internal combustion engines shall be stopped immediately and the same shall not be re-started till the area is found free from flammable gases/vapours.
3. Discharge from bleed off lines shall in no case be allowed in mud tanks.
4. Effective steps shall be taken to keep mud tanks free from oil and gas.
5. Exhaust pipe of internal combustion engines shall be insulated/ shielded to prevent its contact with flammable liquids, gases or vapours.

You are requested to take suitable steps to comply with the above recommendations in the interest of safety.

Sd/-
(M.M. Sharma)
Chief Inspector of Mines