§ 27.24 Power-shutoff component.

(a) A power-shutoff component shall be suitably constructed for incorporation in or with permissible and approved equipment that is operated in gassy mines and tunnels.

(b) The power-shutoff component shall include:

1. A means which shall be made to function automatically to deenergize the machine or equipment when actuated by the methane detector at a methane concentration of 2.0 volume percent and at all higher concentrations in the mine atmosphere.

(ii) For an electric-powered machine or equipment energized by means of a trailing cable, the power-shutoff component shall, when actuated by the methane detector, cause a control circuit to shut down the machine or equipment on which it is installed; or it shall cause a control circuit to deenergize both the machine or equipment and the trailing cable.

Note: It is not necessary that power be controlled both at the machine and at the outby end of the trailing cable.

(ii) For a battery-powered machine or equipment, the methane-monitor power-shutoff component shall, when actuated by the methane detector, cause a control circuit to deenergize the machine or equipment as near as possible to the battery terminals.

(iii) For a diesel-powered machine or equipment, the power-shutoff component, when actuated by the methane detector, shall shut down the prime mover and deenergize all electrical components of the machine or equipment. Batteries are to be disconnected as near as possible to the battery terminals.

2. An arrangement for testing the power-shutoff characteristic to determine whether the power-shutoff component is functioning properly.