



**DEPARTMENT OF MINERALS AND ENERGY
WESTERN AUSTRALIA**

SIGNIFICANT INCIDENT REPORT NO. 34

UNDERGROUND VEHICLE FIRE

INCIDENT

An underground mine was evacuated after a fire in the engine compartment of a light vehicle proved difficult to extinguish. No one was injured.

The vehicle was left unattended with the engine running whilst a worksite was being inspected by the driver. On his return he observed flames coming from the engine compartment. Heat and flames prevented the bonnet from being lifted. An extinguisher discharged from under the vehicle controlled the fire.

CAUSE

Examination of the vehicle showed that the fire resulted from an ineffective engine earthing connection. Current normally carried by the connection had been diverted through the throttle linkage causing it to become hot. A non-metallic fuel line in contact with the linkage melted and fire was initiated when fuel sprayed onto the engine. Heat also caused the vehicle's battery to explode.

COMMENTS AND PREVENTATIVE ACTION

1. There was prior evidence that the electrical system was faulty. The lights were not working correctly and the vehicle was difficult to start. Attention to these defects would have prevented the fire.
2. Maintenance procedures should ensure that engine earthing connections are effective.
3. Non-metallic fuel lines should be independently supported and not attached to or in contact with electrical wiring or metal cables.
4. Caution is required when attempting to raise the bonnet of a vehicle that has an engine compartment fire as flashover may occur and cause injury to persons in the area.

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SAFETY AWARENESS SAVES LIVES