

# FIRE

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## OBJECTIVE:

The objective is to prevent harm related to equipment fires to ALARP, including consideration in design for foreseeable human error.

## GENERAL OUTCOME:

### The intended design outcome should include:

- Elimination of sources of ignition and fuel
- Protection of the operator should fire occur
- Automatic suppression of fire
- Automatic engine shutdown and isolation of fuel sources, should fire occur
- Manual suppression of the fire should auto suppression be inadequate

# Potential Unwanted Events (PUEs)

**4.1 Harm from fire arising from damage (including heating, melting and chaffing) to electrical cables and components; hydraulic hoses; and fuel lines due to design inadequacies, including;**

- a. poor location
- b. inadequate segregation of fuel and ignition sources
- c. flaws in clamping or restraints

## SURFACE



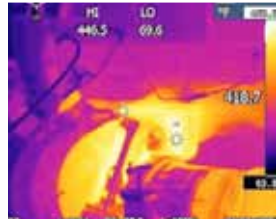
## UG COAL



## UG HARD ROCK



## EXPLORATION DRILLING



## Potential Unwanted Events (PUEs)

### 4.2 Harm from fire arising from heat generated by surface frictions (including tires).

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## Potential Unwanted Events (PUEs)

### 4.3 Harm from fire igniting in, or being propagated by, the build up of combustibile material e.g. dirt, oily rags.

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## Potential Unwanted Events (PUEs)

### 4.4 Harm from entrapment in the cabin due to fire blocking emergency egress.

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## Potential Unwanted Events (PUEs)

### 4.5 Harm from entry into hazard zones due to the location of isolation points.

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## Potential Unwanted Events (PUEs)

### 4.6 Injury to personnel, either during normal operation or in the event of a roll over or other accident, from inhalation, ingestion, skin abrasion, slips, trips or other mechanism due to:

- a. FSS components that are poorly located
- b. Accidental actuation of the FSS

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## Potential Unwanted Events (PUEs)

### 4.7 Harm from excessive/uncontrolled spread of fire, due to:

- a. Lack of automatic engine shutdown and/or isolation of fuel sources
- b. Inactivation of FSS due to the effects of fire and/or other damage
- c. Delayed activation of FSS due to difficult access to FSS controls
- d. Reduced effectiveness of FSS as a result of OEM fitted options, such as noise suppression blankets

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#### EXPLORATION DRILLING

