

Flare Stack Fires

Safety Alert

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Enform

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Description of Incident:

On several separate occasions in the last year, fires of vegetation and waste material occurred at or adjacent to several oil and gas facility sites. The source of these fires was the flare stacks.



View of one fire and another location following a fire

What Caused It?

A build-up of carbon within the flare stacks resulted in hot embers being released which led to the ignition of vegetation and waste materials.

Contributing Factors Included:

- Lack of preventative maintenance on flare stacks
- Vegetation present in the vicinity of the flare stacks
- Improper disposal and storage of wastes like wax, iron sulphides, oily rags and filters

Corrective/Preventative Actions:

- Soil surface should be cleared of flammable materials and vegetation, at least 30 metres around incinerators and at least 1.5 times the height of the flare stacks. Additional distance may be required if sour products are involved (2.5 times height of stack) or for prevailing wind direction conditions.
- Flare stack maintenance should be scheduled into asset management for facility turnarounds
- Materials that are flammable or pyrophoric (self-combustible in air) should be stored and disposed of in special waste bins and kept out of general waste streams
- Facility personnel should be instructed to keep waste or rag bins closed at all times

By industry, for industry

