



CONTRACTORS AND THE FIRE HAZARD

Fires caused through the activities of contractors or sub-contractors are not uncommon. Not surprisingly, most of these involve cutting, welding or other hot work.

Some examples:

- A sprinkler system was being installed in a Benoni warehouse which contained bales of raw jute. A workman dropped a spanner between bales of jute and struck a match in order to find it. Loose fibres were ignited and the fire spread rapidly amongst the bales causing extensive damage.
- Welding operations on a metal conveyor in the storeroom of a supermarket in Pietermaritzburg started a fire which resulted in a number of employees having to be rescued from the first floor by the brigade.
- In Johannesburg, an electrical contractor was using an LP Gas lamp in the roof void of a thatched roof house. Heat ignited the thatch destroying part of the roof.
- A cinema complex under construction in Durban experienced three fires, all believed to have been caused by workmen trying to keep warm. Fortunately, in all cases, fires were detected and brought under control in the early stages.
- In Heidelberg, considerable damage was caused when a welding spark set fire to dry grass covering thousands of carnations awaiting export. Extensive damage was also caused to a number of greenhouses.
- Workmen were carrying out welding operations on pipework in the bund of a group of fuel storage tanks in Durban. It is believed that a spark ignited vapours within a vent pipe connected to a half-filled storage tank. The roof of the tank was blown off in the resulting explosion.
- A contractor was installing a fixed CO₂ flooding system in an area where flammable liquids were present. While all electrical apparatus was of the flameproof variety the contractor was using a non-flameproof drill and extension lead junction in the area. Although no fire occurred the potential hazard was obvious.





Many of the more experienced and responsible contractors are vitally aware of the consequences of hazardous operations being conducted on the premises and endeavour to exercise control over such activities. The record however, speaks for itself and there are obviously those firms that do not give fire safety the consideration which is its due. Many have made the valid claim that the task of supervising what at times amounts to a large number of sub-contractors on a job is extremely difficult.

Basic Considerations

Management of the premises on which the contractors are engaged can do much to minimise the possibility of fires caused through contractors work.

The following list of basic considerations is intended for the guidance of both management and outside contractors:

- Management should ascertain what equipment the contractors will be using and the exact location in which they will be working.
- Every endeavour should be made to avoid the use of naked flames in areas of high risk, **i.e.:** flammable liquids or readily combustible goods or packaging materials. In such cases management should ask the question: "Can the work be accomplished by safer methods even if this results in slightly higher costs or time delay". Comparison of the extra time and cost against a complete stoppage of work as a result of a major fire should influence management in adopting the safer method.
- The contractor should be made aware of the Company's safety rules, **e.g.:** "No Smoking" areas, where hot-work permits are required, or where flameproof or intrinsically safe electrical equipment should be used. The contractor's supervisory staff should be made to sign a copy of the Company's safety rules.
- Under no circumstances should cutting or welding equipment be used without prior consultation with the firm's fire/safety officer, works engineer or whoever is responsible for fire safety in the plant.



- Contractors staff should be familiar with location and means of operation of fire alarms and fire-fighting equipment. If water supplies are to be shut down the contractor should advise management in order that alternate supplies or means of protection may be organised. In this instance it would be advisable to discuss the problem with the local fire brigade and the firm's insurers.
- Where sprinkler mains supplies have been shut down, the provision of a fire brigade booster connection may enable the system to be kept charged from some other source.
- Ascertain the extent and type of liability insurance cover the contractor possesses. Discuss this aspect with your own insurer.

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