
API Recommended Practice 756

Management of Hazards Associated with Location of Process Plant Tents

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This Recommended Practice (RP) provides guidance for managing the risk from explosions, fires and toxic material releases to on-site personnel located in tents. The term “tent” is used to describe a wide range of structures and is defined in 3.18. This RP was developed for use at refineries, petrochemical and chemical operations, natural gas liquids extraction plants, natural gas liquefaction plants, and other onshore facilities covered by OSHA 29 CFR 1910.119.

The focus of this RP is primarily on process related hazards. However, non-process related hazards may exist which could present risks to tent occupants. Previous incidents have demonstrated that tent occupants are susceptible to injuries from fires originating inside the tent, from tent collapse due to extreme weather, and from falling objects. Some of these hazards are addressed by tent design standards, manufacturer’s recommendations, and local regulations.

This RP is based on the following guiding principles.

- a) Locate personnel away from process areas consistent with safe and effective operations.
- b) Minimize the use of tents intended for occupancy in close proximity to process areas.
- c) Manage the occupancy of tents in close proximity to process areas.
- d) Design, construct, install, modify, and maintain tents intended for occupancy to mitigate hazards that the tent siting could present to occupants in the event of explosion, fire, and toxic material release.
- e) Manage the use of tents intended for occupancy as an integral part of the design, construction, maintenance, and operation of a facility.

The American Petroleum Institute (API) performed vapor cloud explosion (VCE) tests to determine the response of tents to the potential explosion hazards that may be present at refineries, petrochemical and chemical operations. The data compiled from the testing is contained in API Technical Report (TR) 756-1, “Process Plant Tent Responses to Vapor Cloud Explosions—Results of the American Petroleum Institute Tent Testing Program”.

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