U. S. Chemical Safety and Hazard Investigation Board
RECOMMENDATIONS STATUS CHANGE SUMMARY

Report:	Gas Well Blowout and Fire at Pryor Trust Well 1H-9
Recommendation Number:	2018-01-I-OK-R5
Date Issued:	June 12, 2019
Recipient:	American Petroleum Institute (API)
New Status:	Open – Awaiting Response or Evaluation/Approval of Response
Date of Status Change:	June 12, 2019

Recommendation Text:

Develop a new recommended practice or modify an existing recommended practice (e.g. API RP 54 Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations) addressing the protection of rig workers on onshore drilling rigs from fire and explosion hazards in the event of a blowout. The recommended practice will specifically address:

(a) Protecting drilling cabin occupants from blowout hazards including heat, blast overpressure, and projectiles, such as requiring an increased fire rating for the driller's cabin that would allow enough time for occupants to evacuate during a blowout and fire;

(b) Minimum required evacuation methods from the drilling cabin, rig floor, and mast or derrick in the event of a blowout so that personnel can quickly escape in variable hazard location conditions. For example, floor exit hatches and exits on the driller's cabin wall opposite the rig floor could provide safe evacuation routes during a blowout and fire; and

(c) Proximity of the Blow Out Preventer (BOP) activation controls with the driller.

The above options could be retrofitted on existing drilling rigs. Additionally, formally evaluate alternative locations for the drilling cabin that establishes a safe distance from fire and explosion hazards (e.g., ground level).

Board Status Change Decision:

A. Rationale for Recommendation

On January 22, 2018, a blowout and rig fire occurred at Pryor Trust 0718 gas well number 1H-9, located in Pittsburg County, Oklahoma. The fire killed five workers, who were inside the driller's cabin on the rig floor. They died from thermal burn injuries and smoke and soot inhalation. The blowout occurred about three-and-a-half hours after removing drill pipe ("tripping") out of the well.

The cause of the blowout and rig fire was the failure of both the primary barrier—hydrostatic pressure produced by drilling mud—and the secondary barrier—human detection of influx and activation of the blowout preventer—which were intended to be in place to prevent a blowout.