



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

Report:	Aghorn Operating Inc. Waterflood Station H ₂ S Release
Recommendation Number:	2020-01-I-TX-R2
Date Issued:	May 21, 2021
Recipient:	Aghorn Operating Inc.
New Status:	Closed – Acceptable Action
Date of Status Change:	April 14, 2022

Recommendation Text:

For all Aghorn facilities, develop a site-specific, formalized and comprehensive Lockout/Tagout program, to include policies, procedures, and training, to protect workers from energized equipment hazards, such as exposure to H₂S. Ensure the program meets the requirements outlined in 29 CFR 1910.147 and includes energy control procedures, training, and periodic inspections.

Board Status Change Decision:

A. Rationale for Recommendation

On October 26, 2019, an Aghorn Operating Inc. (Aghorn) employee responded to a pump oil level alarm at Aghorn's Foster D waterflood station in Odessa, Texas. In response to the alarm the employee worked to isolate the pump. He closed the pump's discharge valve but only partially closed the pump's suction valve. At some point on the night of the incident, the pump automatically turned on and water containing hydrogen sulfide (H₂S), a toxic gas, was discharged from the pump. The employee was fatally injured from his exposure to the H₂S. Subsequently, the spouse of the employee gained access to the waterflood station and searched for her husband. During her search efforts, she was also exposed to the released H₂S and was fatally injured.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found that at the time of the incident, Aghorn did not have any written Lockout/Tagout policies, procedures, or associated training. The CSB also found that at the time of the incident the employee was not wearing his personal H₂S detection device and there was no evidence that Aghorn management required the use of these devices. As a result of these and other findings, the CSB issued seven recommendations to Aghorn. This status change summary addresses CSB Recommendation No. 2020-01-I-TX-R2.

B. Response to the Recommendation

On September 23, 2021, Aghorn provided a response to the CSB that they developed a Health, Safety and Environmental Manual which includes a chapter on a formalized and comprehensive Lockout/Tagout program that meets the requirements outlined in 29 CFR 1910.147 and includes energy control procedures, training, and periodic inspections. Aghorn also provided a training

sign-in sheet from a safety meeting that demonstrates personnel training on the Lockout/Tagout program.

Board Analysis and Decision

Based upon the information above, the Board determined that Aghorn Operating Inc. addressed the requirements of the recommendation. Therefore, the Board voted to change the status of CSB Recommendation No. 2020-01-I-TX-R2 to: “Closed – Acceptable Action.”