

Vac truck damaged by explosion and fire

Description:

Multiple vacuum trucks performing production tank cleaning operations were involved in a flash fire. No injuries occurred.

Truck A was operating at the time. Truck B, located approximately 3 m away, had just completed tasks. Vented exhaust from Truck A was directed towards the fired boiler on Truck B. The vented exhaust caused an explosion and fire. Workers were able to perform an emergency shut down (ESD) and extinguished the fire.

Lessons Learned:

- The field level hazard assessment did not recognize the potential flammable hazards, use of a vent line, direction of vented exhaust, or associated fired equipment nearby.
- The vac trucks were staged too close together for the tasks.
- The scope of work did not account for the potential of simultaneous operations.



Equipment staging at production tanks, Truck A (left) and Truck B



Side view of staged equipment



Fire damaged equipment

What did they learn? What were the recommendations:

- Field level hazard assessments should include hazards related to simultaneous operations and working with flammable products.
- Safe equipment staging, including vent line placement, should be considered during simultaneous tasks.
- While working with flammable products, ongoing Lower Explosive Limit (LEL) measurement should be conducted.
- Formal hazard assessments should include potential hazards for simultaneous operations and flammable products.

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