

SAFETY MEMO

May 31st, 2021 – Natural Gas Pipe Collision



Incident

Description of the incident

A mechanical verification of a mobile scissor lift was to be completed by a sub-contracted inspector. The area where the inspection was to be conducted was located within a warehouse. The subcontractor had no prior knowledge of the layout of the facility and did not complete a job hazard analysis prior to starting work on the scissor lift.

During the inspection, the mechanic elevated the lift and attempted to move it forward. As he moved the scissor lift, the raised platform violently struck a gas feed pipe connected to a gas heater, which caused a rupture of the pipe and the pressurized gas escaped into the warehouse area.

The mechanic made use of the lift to elevate himself to the heater level and manually close the gas feed valve. He then went on with his inspection pretending like nothing had ever happened and without informing a supervisor of the gas leak.

Human factor issues

Inadequate planning and management of the task to be completed:

- No risk analysis or job hazard analysis completed.
- No safety perimeter was established.
- The proper technique for safe use of the equipment to be verified was not used.
- The contractor left the job site in an unsafe condition and did not inform the site supervisor of the damaged natural gas pipe that needed immediate repair.

Possible consequences

Had the gas leak not been identified by the facility staff, the warehouse could have filled with gas, causing an explosion. The resulting consequences of the explosion could have been extremely severe.



Lessons learned

- A job hazard analysis could have identified the gas piping in the work area. The best way to control risk is to simply eliminate the risk, thus a different work area should have been chosen for the inspection.
- When an incident occurs, always notify a supervisor immediately.
- When work is done by an independent subcontractor, never assume that a job hazard analysis was completed.
- A job hazard analysis should be completed by all sub-contractors prior to starting any work on site and this must be communicated to all contractors working on site as a part of their safety orientation.

Conclusion

Tasks that may initially seem trivial or inherently safe can, in fact, be dangerous. Whenever a task is undertaken within a facility or warehouse, one must always identify potential risks (gas piping, ammonia conduits, electrical conduits etc.) and adapt the manner in which the task is handled according to those risks. The completion of a job hazard analysis must always be performed no matter how benign the task may seem.

