

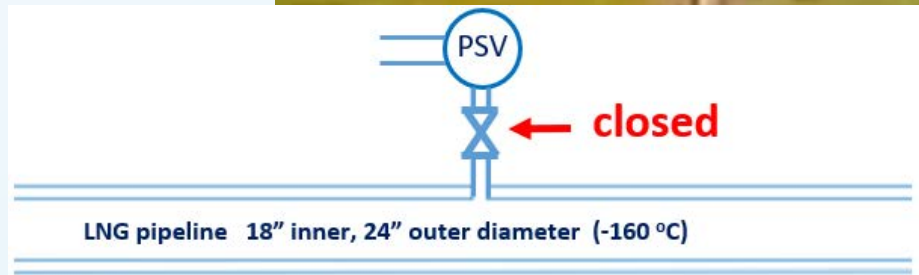
LNG Explosion

EPSC Learning Sheet November 2022



What Happened:

After an inspection of a Pressure Safety Valve (PSV) it remained blocked-in: separating an LNG pipeline from the PSV. During pressure build-up, the LNG pipeline started to leak creating a methane cloud that exploded.



Aspects:

- A valve between a PSV and the equipment that needs pressure protection requires special attention.
- An isolation checklist helps to assure all valves are managed well, and end-up in the right position after maintenance.
- PSV maintenance requires individual permit to work.
- Pre Start-up Safety Review, after maintenance work, can validate the position of critical valves.
- Critical valves that must be open during production, can be locked with a car-seal or with a key-lock system that shows a green or red key in the control room.

A pressure safety valve must be connected to the system it protects