

Fire Caused by Hose Repaired with Duct Tape!

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On an offshore oil platform, operators were transferring methanol from a portable chemical transporter tank connected by a hose to a storage tank. When the tank was lifted by a crane to gravity feed the storage tank, methanol began spraying out from a hole in the hose. The methanol ignited on the top deck. Methanol that was sprayed over the side also ignited by the hot exhaust of a compressor located immediately below the transfer point on the second deck. The fire was compounded by the breaking of the transfer tank's sight glass when a crewman attempted to kick the valve closed. The fire spread as relief valves on two other chemical transport tanks opened.

After twenty-two 30-pound hand-held chemical fire extinguishers, two 125-pound wheeled fire extinguisher units, and the firewater system were used, the fires on both decks were contained. One man received second-degree burns. After the fires were extinguished, it was discovered that the hose used to feed methanol from the transporter to the storage tank was split and had been repaired with duct tape prior to the operation!

What You Can Do?

- NEVER make temporary or unauthorized repairs on equipment in hazardous material service without a management of change review by qualified personnel.
- ALWAYS inspect equipment before using it. If there is any sign of damage, corrosion, improper repair, or any other defect, replace the equipment before you start the job.
- Avoid transferring flammable products near ignition sources such as compressors.

Check your equipment before you start the job!

Questions:

1. **(15 min)** Discuss at least three measures which should have been taken after the previous hose leakage. Consider whether flexible hoses should be used in this situation and whether the portable chemical transporter should have been lifted in the air. Suggest safer alternative methanol transfer methods. *Hint:* You may find this [resource](#) helpful.
2. **(10 min)** *What did you learn?*
What lessons have you learned from this article? What do you think is the proper way to transfer methanol from a portable chemical transporter tank to a storage tank? Note: this proper and safe method of methanol transfer was not discussed in the article. *Hint:* You may find this [resource](#) helpful.