by Tom Jackson TJackson@randallreilly.com safety watch



llustration by Don Loma

ire is bad enough, but when you run away holding the fuel for the fire, it can only lead to bad consequences.

An automotive mechanic had spent much of a day removing an old fuel tank and installing a new one in a truck. The rear of the truck was elevated on a lift, and the mechanic had used an incandescent drop line with an extension cord under the truck to see the work better. The lighting within the shop was poor, and mechanics had to rely on portable lights to illuminate their work area.

He had bolted up the new fuel tank, hooked up the fuel lines to the engine and lowered the truck on the lift but had not yet installed the filler hose, or "bung" as it's sometimes called. He also left the drop light on the shop floor.

Nonetheless, the mechanic used a bucket filled with gasoline to pour some gas into the new tank. The absence of a fuel bung and the use of an unapproved fuel container caused some gasoline to spill onto the shop floor. The

spilled gasoline splashed onto the drop light and ignited.

The mechanic attempted to run from the flames but inadvertently carried the bucket with him. The flames followed the gasoline spilling from the bucket, caught up with the mechanic and exploded when it reached him. Other employees in the shop immediately grabbed the fire extinguishers to put out the fire but backed away because the heat was too intense. A water hose was also used to help put out the fire.

The mechanic died later as a result of third-degree burns over 95 percent of his body.

How this accident could have been prevented

- Never put fuel into a partial or incomplete tank or assembly.
- Never use buckets, jugs or other containers to transfer fuel. Use only approved containers with leak-proof spouts. An approved safety container equipped with an automatic closing cap and flame arrester prevents fuel from splashing out and flames from

getting in. Had the victim used an approved container, the fire might have still occurred, but the container would have been protected and he probably would not have suffered fatal injuries.

- In any environment where gasoline or other flammables are present, all electrical components must be off the floor and secured so that neither the liquid fuel nor fumes can reach them. If illumination is absolutely required in proximity to a fueling operation, an explosion/ignitionproof or intrinsically safe drop light should be used. Explosion/ ignition-proof lights enclose the bulbs in a case that can withstand the force of the bulbs exploding, and they prevent substances from reaching the bulbs where high temperatures might cause them to ignite.
- Use sufficient overhead fluorescent lights to fully illuminate shop environments and reduce the need for drop lights and other portable lights that require extension cords.

Date of safety talk:_____ Attending:

Leader: