Safety First / An Ounce of Prevention

Static Electricity is Blamed for Explosion

"User of hand pump is burned while transferring gasoline from a 55-gallon drum, which had been sloshing around in the back of a pickup truck. Explosion took place when the liquid entered the receiving tank. . . It is presumed that the potential static electricity in the receiving tank was different from that of the holding tank, which was aggravated due to an extremely dry climate. . ."

Flammable solvents are often purchased in bulk and transferred manually or with motor driven pumps. Care must be taken to neutralize static electricity which may rest as a potential in the storage tank, as well as that which may rest in the receiving tank. The potential of such would, of course, be greatly increased if the liquid were allowed to splash around during movement of the container. Therefore both containers must be satisfactorily grounded, and then each of the containers must be bonded, that is connecting the ground wire from tank to tank so that the potential static electricity is now equalized.

Sparks from Open Motor Cause Explosion

"User of pump is burned while transferring explosive liquids. Accident was caused by the use of an open motor. . . Explosion resulted and the employee was burned over many parts of his body."

In addition to the proper use of bonding and grounding cables, when motorized pumps are used to transfer flammables and combustibles, explosion-proof or air driven pumps should be used. Explosion-proof electric or air motors are often wired and/or enclosed in such a way that no sparks can be emitted from the motor casing - otherwise sparks from the motor could cause the flammable liquid to flash or explode.

Splashing of Acid Causes Burns

"Improperly closed pressure vessel containing aggressive acids allowed liquid to escape and splash operator, causing skin burns when pump he energized created pressure in the vessel."

Operator should have checked the instruction manual and followed procedures as set forth by the manufacturer to ensure that the cover of the pressure vessel was securely tightened. Operator could also have prevented bodily injury if he was protected with adequate clothing, which is fabricated to resist such liquids.

Injuries due to splashing of aggressive liquids or explosion of flammables can be avoided by wearing proper clothing, which may include coveralls, apron, shoes, goggles, gloves, face mask and hat.

Each of the above operators could have avoided some bodily harm by wearing outer garments for protection from skin burns.

Consult a Dealer in Your Area for these Garments

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