SAFETY TOOLBOX TRAINING – THE HAZARDS OF STATIC ELECTRICITY

SUPERVISOR INSTRUCTIONS:

- Use toolbox trainings to spark safety discussions during monthly meetings with employees
- Submit the employee sign-in sheet to your designated administrative assistant/training coordinator as a record of training

Have you noticed the warning signs printed on gas pumps about the dangers of static electricity while refueling your car? These warnings are not a gimmick. “About 100 static-sparked fires occur at gas stations each year, according to Fowler Associates, a S.C.-based electrostatic research and consulting firm.” In March 2010, a Harrisburg, PA man died when static electricity ignited gasoline vapors causing him to catch on fire as he filled his gas tank.

Static electricity is a charge that is at rest or not moving. However, if a conductive path is provided for the static electricity, a static discharge or spark can occur. For example, a person walking across a carpeted floor (the conductive path) reaches for the doorknob and…ZAP! They receive a static shock. This happens because static electricity is generated when the person walked across the carpet.

The same scenario can also occur when you are pumping gas whereby the spark could ignite gasoline vapors and may cause a fire or an explosion at the pump. So when you are refueling Emory vehicles or your own personal vehicles, make sure you follow the important safety tips outlined below.

Safety Tips for Preventing Fires when Refueling Vehicles:

- Always turn your vehicle engine off while refueling.
- Don’t re-enter the vehicle while refueling because this can recharge your body with static electricity. If you must re-enter the vehicle, discharge static electricity buildup by touching the outside metal portion of the vehicle away from the fuel tank.
- No Smoking
- Keep cell phones and other electronic devices turned off while refueling
- Do not allow children to pump gasoline.
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**Filling Portable Gasoline Containers:**

- When dispensing gasoline into a container, use only an approved portable container.
- **NEVER!!!** Fill gas containers while the container is placed on the inside of a vehicle, in the trunk, on the bed of a pickup truck, or on the floor of a trailer.
- Touch can with gas dispenser nozzle before removing can lid.
- When filling a portable container, manually control the nozzle valve throughout the filling process. Fill the portable container slowly to decrease the chance of static electricity buildup.
- Fill container no more than 95 percent full to allow for expansion.
- Place cap tightly on the container after filling - do not use containers that do not seal properly.
- When transporting gasoline in a portable container, make sure it is secured against tipping and sliding.
- Never leave a gasoline container in direct sunlight or in the trunk of a car.

**If a fire occurs during refueling:**

- You should leave the nozzle in the vehicle and back away from the vehicle.
- Use the emergency shut off button to shut off the pump.
- Notify the station attendant.

**QUESTIONS FOR DISCUSSION**

1. True or False. Static electricity can ignite a fire or cause an explosion.  
   **Answer:** True

2. How can we prevent fires when refueling our vehicles?
   a. By not talking on cell phones
   b. Smoking
   c. Turning off your vehicle engine
   d. Answer A and C  
   **Answer:** D – Answer A and C

3. What should you do when filling portable gasoline containers?
   a. Use only approved portable containers
   b. Remove the gasoline containers from the vehicle and place them on the ground before refueling.
   c. Fill the container up slowly to decrease the chance of static electricity buildup.
   d. All of the above  
   **Answer:** D – All of the above

**REMEMBER:** HINDSIGHT EXPLAINS THE INJURY THAT FORESIGHT WOULD HAVE PREVENTED