Objectives

This course is designed to build on and recap foundational safety training already provided by the ITP.

By the end of this lesson fueling personnel will be able to:

• Explain the requirements for safety equipment
• State the hazards associated with refueling and how they are best managed
• Explain the response actions to potential emergencies and hazards
• Describe examples of safe operating procedures with particular relevance to:
  • Vehicle manoeuvres within aircraft operating areas
  • Manage differing electrical potentials of both equipment and vehicles
• State an awareness of the additional airline specific fueling procedures that may exist at their location and describe how these can be best integrated into operations.
• Explain how human factors can impact refueling safe operations

Key topics

The essential items of Personal Protective Equipment

• Headgear
• Safety shoes
• Safety glasses
• High visibility anti-static vest
• Hearing protection
• Gloves

Fueling Equipment Safety Checks

• General condition
• Fuel leaks
• Fire extinguishers
• Deadman control
• Nozzle fueling pressure
• Hoses, swivels and nozzles
Managing Fueling Hazards

- Identify common hazards that occur while refuelling, including electrostatic charge, fuel vapor, or maintenance activity
- Obeying the fuel safety zones and the equipment hazard zone
- How to respond to emergency situations such as fire or fuel spill

Parking a Fueling Vehicle

- Rules of manoeuvring the fueling vehicle safely on the ramp, including testing the brakes, the safety no-drive zone around the aircraft, importance of keeping clear of the fuel vents on the wings, the exit route in case of emergency
- How to manage the different electrical potentials between the vehicle and the aircraft

Bonding

- How electrostatic charge builds up during fueling
- How bonding and grounding prevent ignition from static electricity discharge

Human factors affecting work performance

- Recognizing the main human factors which can be personal, environmental or related to the equipment and resources used.
- The dirty dozen top human factors affecting ground operation
Safe Fueling - Maneuvering Your Vehicle

Safety Zones
You've checked your PPE, made sure your fueling equipment is in good order, and surveyed the ramp for fueling hazards. It's time to think about driving your fueling vehicle to the aircraft. Before doing this, make sure you know the fuel safety zones you need to obey. The reason for the fuel safety zones is to keep a safe distance between any potential ignition sources like the engine of your truck and the fuel and vapor which can catch fire.

Select the highlighted areas on the aircraft to find out more.

Fuel safety zone around the vents
This zone is the 10ft / 3m radius around aircraft fuel vents. It extends from the vents down to the ground during fueling operations. During fueling, no ignition sources are allowed in this zone. Always respect this safety zone; never drive or park your vehicle within 10 ft / 3m of aircraft fuel vents. Now select the aircraft itself.

Drive Your Truck In
That's great. Now you're ready to try driving to the aircraft yourself. Select START when it is safe to start driving in.

You need to check your brakes again 10ft / 3m from the aircraft. You're getting very close now and can't afford to take chances!