
Fuel Island Safe Pumping And Static Grounding Procedure

1.0 Objective & Scope

The objective of this procedure is to ensure the safe and compliant dispensing of diesel, gasoline, or other flammable fuels at fleet fuel islands, with a primary focus on static electricity grounding to prevent ignition. This procedure applies to all field operations personnel, fleet drivers, and logistics staff authorized to operate fuel pumps at company-controlled or client fuel islands.

The Lead Driver or designated fuel attendant is responsible for executing this procedure and verifying all grounding connections before, during, and after pumping. Non-compliance with static grounding requirements may result in fire, explosion, serious injury, or environmental release.

2.0 Required Equipment & Tools

- Approved fuel nozzle with automatic shut-off
- Static grounding cable with clamp (minimum 10 ft, copper or approved alloy, rated for flammable environments)
- Grounding rod or designated grounding point (verified to be bonded to earth)
- Fuel cap key or tool (if required)
- Spill kit (absorbent pads, socks, disposal bags)
- Fire extinguisher (Class B, minimum 10 lb, located within 50 ft of fuel island)
- Personal protective equipment (PPE): safety glasses, flame-resistant coveralls, steel-toed boots, nitrile gloves
- Mobile tablet with SiteQueue application for logging fueling events and sign-offs
- Fuel island emergency shut-off switch (verify location before starting)

3.0 Site Safety & Hazard Assessment

- No smoking, open flames, or spark-producing devices within 10 metres of the fuel island at any time.
- All personnel must wear flame-resistant coveralls, safety glasses, and steel-toed boots while on the fuel island.
- Verify that the fuel island is equipped with a clearly marked emergency shut-off switch and that all personnel know its location.
- Inspect the grounding cable and clamp for visible damage, corrosion, or fraying before each use. Do not use if damaged.
- Ensure the vehicle engine is turned off and all electrical accessories (radio, lights, HVAC) are switched off before connecting the grounding cable.
- Assess the area for standing water, ice, or fuel spills. If a spill is present, contain it with the spill kit and do not proceed until the area is safe.
- Confirm that the fuel island is properly bonded to earth (test with a ground resistance meter if available; acceptable resistance is less than 10 ohms).
- Do not fuel during lightning storms or if there is visible electrical activity within 5 km.

4.0 Step-by-Step Execution Procedure

1. Position the vehicle so that the fuel fill port is within reach of the fuel hose and the grounding cable can reach the designated grounding point without stretching.
2. Turn off the vehicle engine and all electrical accessories. Remove the ignition key and keep it in your pocket to prevent accidental restart.
3. Inspect the grounding cable and clamp for any signs of wear, corrosion, or damage. If the cable is compromised, do not proceed and report the issue to the fleet supervisor.
4. Attach the grounding clamp to a clean, unpainted metal surface on the vehicle chassis (e.g., frame rail, suspension component, or designated grounding stud). Do not attach to the fuel tank, exhaust system, or any painted surface.
5. Connect the other end of the grounding cable to the designated grounding point on the fuel island (typically a copper rod or bonded metal plate). Ensure the connection is secure and metal-to-metal.
6. Open the fuel fill cap and place it in a clean, designated location. Do not place it on the ground or on a dirty surface.
7. Insert the fuel nozzle fully into the fill neck and begin pumping at a moderate rate. Do not leave the nozzle unattended. Keep the nozzle in contact with the fill neck at all times to maintain a continuous ground path.
8. Monitor the fuel flow and stop pumping immediately if you see or smell fuel vapours, hear unusual sounds, or notice any spillage. Do not overfill the tank.
9. When the nozzle automatically shuts off, do not attempt to top off the tank. Remove the nozzle carefully and allow any residual fuel to drain into the fill neck.
10. Replace the fuel fill cap securely and tighten it until it clicks or is fully seated.
11. Disconnect the grounding cable from the vehicle first, then from the fuel island grounding point. Coil the cable neatly and store it in its designated location.
12. Start the vehicle engine only after the grounding cable is fully disconnected and stored. Drive away from the fuel island slowly, checking for any fuel drips or leaks.

5.0 Verification, Sign-off & Reporting

1. Visually inspect the fuel fill area and the ground beneath the vehicle for any signs of fuel spillage. If a spill is detected, contain it immediately with the spill kit and report it to the site supervisor.
2. Log the fueling event in SiteQueue: enter the vehicle unit number, fuel type, volume dispensed (from pump meter), and odometer reading (if applicable).
3. Capture a photo of the pump meter reading and a photo of the vehicle fuel fill area (showing no leaks) using the SiteQueue mobile app.
4. If the fuel island is at a client site, obtain a digital signature from the client representative confirming that the fueling was completed safely and without incident.
5. Submit the fueling log in SiteQueue. The system will automatically timestamp the entry and store all photos and signatures for compliance records.
6. If any equipment malfunction, grounding issue, or safety concern was observed, complete a hazard report in SiteQueue and notify the fleet supervisor immediately.

Regulatory Disclaimer: This document is a generic site management template provided for educational purposes. The end-user assumes all liability for reviewing, adapting, and validating all field protocols against local site requirements.