

Safety Note

UNIVERSITY OF CALIFORNIA
AGRICULTURE AND NATURAL RESOURCES
ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #25

SAFE FUELING PRACTICES



According to information compiled by the Petroleum Equipment Institute, more than 175 fires occurred, between 1992 and 2003, when fuel containers were being filled or vehicles, machinery, or equipment were being fueled. About thirty-five percent of the fires resulted in injuries ranging from singed/burned hair to first and second degree burns to hands, legs, faces, and torsos. Sixty percent of the fires happened during the winter months of December through March. California Code of Regulations (CCR) Title 8, Section 3319 addresses safe fueling practices.

Safe Fueling Practices

- CCR Title 8, Section 3319 (a) requires the following:
 - 1. No internal combustion engine shall be refilled with a flammable liquid while the engine is running.
 - 2. Fueling shall be done to minimize spillage.
 - 3. If a spill occurs, it shall be washed away completely, evaporated, or equivalent action taken to control vapors before restarting the engine.
 - 4. Fuel tank caps shall be replaced before starting the engine.
- Never smoke, have open lights or flames, or operate arcing equipment near fuel storage tanks or internal combustion engine equipment when fueling with flammable liquids [CCR Title 8, Section 3319 (c)].
- Always use approved safety type fuel containers equipped with automatic closing caps and flame arresters [CCR Title 8, Section 3319 (e)].
- Do not enter your vehicle once you have started fueling. Movement back out of the vehicle may cause you to accumulate a static charge which can discharge and cause a fire when you touch the fuel pump handle.
- Always fill portable fuel containers while they are sitting on the ground. A portable fuel
 container that has been residing (and sliding around) in a truck bed with a plastic liner or
 carpeting may acquire a static charge that is unable to discharge due to the insulating
 nature of the truck bed material. The acquired static charge may ignite fuel if dispensing is
 conducted in the truck bed.
- There is no verifiable evidence that mobile phones, pagers, or portable radios and CD players cause ignition of flammable fluids when fueling vehicles, machinery, equipment, or portable containers.
- Never top-off fuel tanks or portable containers or block open the fuel pump handle trigger.
- Always use soap and water to wash any spilled fuel off your hands.
- In the event of a fire, do not remove the pump nozzle from the fuel tank or portable container. Immediately engage the emergency fuel shut-off, sound the fire alarm, and if feasible, deploy a fire extinguisher to put the fire out. If a fire extinguisher is not capable of putting the fire out, immediately notify a supervisor or the safety coordinator of the situation.