CLEANING PETROLEUM-BASED FUELS FROM HOUSEHOLD APPLIANCES

Household appliances, such as laundry washing machines, dishwashers, hot water heaters, ice makers, and refrigerators, are exposed to the water supply, and fuel contaminants may adsorb (stick) to wetted surfaces. Additionally, ice makers and refrigerators with water dispensers likely have a filter that is intended to reduce chlorine and trace contaminants from the water to improve taste and protect consumer health. These filters will remove some or all of the fuel contamination. No permanent damage to these appliances is expected; however, the contamination must be removed to safely return them to service. The following are recommended procedures to clean these appliances and should be performed after the quality of the public water supply has been verified and the appropriate Public Health Authority has recommended its return to service.

**Hot Water Heater** – The following should be conducted by personnel who are familiar with hot water heater operation:

1. Turn off the hot water heater electric at the circuit breaker box or the gas supply according to the manufacturer instructions.
2. Flush the hot faucet closest to the hot water tank until the temperature drops to warm.
3. Turn off the tank cold water feed valve (typically above the hot water tank).
4. Attach a hose to the bottom drain valve. Direct the end of the hose outside, to a floor drain, or into a bucket.
5. Open the closest hot water faucet to prevent a vacuum in the plumbing. Open the tank drain valve, completely drain the tank, and then close the valve. Open the cold water feed valve to fill the tank. Once the tank is full, a steady water stream should be observed from the closest hot water faucet.
6. Repeat the tank flushing procedures (steps 3 and 5). Close the faucet and remove the hose when complete.
7. Turn on the tank electric or gas supply. As you open other hot faucets, you may temporarily experience air in the system.

Flush household plumbing – Remove and discard all point-of-use filters, if present. Starting on one side of the residence and working to the other, flush all hot- and cold-water sink, shower, and tub faucets for 15 minutes. Multiple faucets can be flushed simultaneously. Install new point-of-use filters, if desired. Flush each toilet twice.

**Ice makers** – Discard ice, allow the ice container to refill with ice, and then discard. Repeat 3 times. If the ice smells of fuel, then replace the water line feeding the ice maker.

**Refrigerators with water dispenser** – Remove the water filter, if present, and replace with a dummy filter or plug supplied by the manufacturer (if required). If dummy filter or plug is required and not available, then leave the old filter in place and discard after flushing. Flush water from the dispenser for 15 minutes. If the water smells of fuel after flushing, replace the water line feeding the refrigerator. Install a new water filter, if applicable.
Dishwasher and Laundry Washing Machine

1. Remove, clean, and replace any screens and filters internal to the unit or in water supply lines.
2. Run the unit empty (without dishes or clothes), adding regular detergent as during normal operation.
   Select the most rigorous cycle available for the dishwasher. Select the hot wash – cold rinse washing machine cycle.
3. Repeat dishwasher and washing machine procedures (step 2).
4. If the unit smells of fuel, then repeat the procedures above with the addition of ¼-cup household chlorine bleach.

Other small appliances – Other small appliances (e.g., coffee makers, blenders), that may have contacted fuel-contaminated water should be cleaned using dishwashing detergent and hot water. Appliances may have manufacturer periodic cleaning instructions, such as using vinegar to remove scale. Those additional appliance-specific procedures should be followed, in addition to general cleaning with detergent. If a fuel smell is noticed after cleaning, then repeating with detergent and small amount of chlorine bleach is recommended.