Inspection Report Item 16:
Food Contact Surfaces Cleaned and Sanitized

FDA Food Code References: 4-501.111, 4-501.112, 4-501.114, 4-501.115, 4-601.11(A), 4-602.11

Cleaning Process: *Cleaning and sanitizing procedures must be part of the standard operating procedures that make up your food safety program. Improperly cleaned and sanitized surfaces allow harmful microorganisms to be transferred from one food to other foods.*

Cleaning is the process of removing food and other types of soil from a surface, such as a plate, glass, or cutting board. Cleaning is done with a cleaning agent that removes food, soil, or other substances. The right cleaning agent must be selected because not all cleaning agents can be used on food-contact surfaces. *(A food-contact surface is the surface of equipment or utensil that normally comes into contact with food.)* For example, glass cleaners, some metal cleaners, and most bathroom cleaners cannot be used on food contact surfaces because they might leave an unsafe residue on the food -contact surface. The label should indicate if the product can be used on a food-contact surface.

Select the appropriate type of cleaning agent to make cleaning easier. Cleaning agents are divided into four categories:

- **Detergents** – Are used to routinely wash tableware, surfaces, and equipment. Detergents can penetrate soil quickly and soften it. Examples include dishwashing detergent and automatic dishwasher detergents.
- **Solvent cleaners** – Are used periodically on surfaces where grease has burned on. Solvent cleaners are often called degreasers.
- **Acid cleaners** – Are used periodically on mineral deposits and other soils that detergents cannot remove. These cleaners are often used to remove scale in warewashing machines and steam tables.
- **Abrasive cleaners** – Are used to remove heavy accumulations of soil that are difficult to remove with detergents. Some abrasive cleaners also disinfect.

Food-contact surfaces used prepare potentially hazardous foods as needed throughout the day to need to be cleaned and sanitized *no less than every four hours*. If they are not properly cleaned, food that comes into contact with these surfaces could become contaminated.

Once food contact surfaces are cleaned, they must be rinsed with potable water to ensure that detergent residue has been removed prior to sanitization.

Sanitizing Process: Once food contact surfaces have been cleaned and rinsed they need to be sanitized they need to be sanitized. There are two methods to accomplish this task.

Hot water/heat sanitization: Heat can be used to sanitize food contact surfaces in one of three ways: hot steam, water, or air.

- Hot water is the most common method
  - If hot water is used in the third compartment of a three-compartment sink, it must be at least 171°F (77°C).
  - If a high-temperature dishwashing machine is used to sanitize cleaned dishes, the final sanitizing rinse must be at least 180°F (82°C).
  - For stationary rack, single temperature machines, the rinse must be at least 165°F (74°C).
  - Cleaned items must be exposed to these temperatures for at least 30 seconds.
- The food contact surface must reach 160°F (71.1°C) as measured by an irreversibly registering temperature indicator. When the indicator has been exposed to a temperature in excess of its rating, it provides a tamper proof display of temperature achievement.

Chemical sanitization

- Different factors influence the effectiveness of chemical sanitizers. The three factors that must be considered are:
  - **Concentration**: The presence of too little sanitizer will result in an inadequate reduction of harmful microorganisms, while too much can be toxic.
  - **Temperature**: Generally, chemical sanitizers work best in water that is between 55°F (13°C) and 120°F (49°C).
  - **Contact time**: In order for the sanitizer to kill harmful microorganisms, the cleaned item must be in contact with the sanitizer (either heat or approved chemical) for the recommended length of time.
- Follow the instructions on the sanitizer's label and use proper dilutions.

Testing Sanitizer Concentration:

Every food establishment must have the appropriate testing kit to measure the concentration of chemical sanitizer. To accurately test the strength of a sanitizing solution, one must first determine which chemical is being used -- chlorine, iodine, or quaternary ammonium. Test kits are not interchangeable so check with your chemical supplier to be certain that you are using the correct kit. The appropriate test kit must then be used throughout the day to measure chemical sanitizer concentrations.

Air-drying

- After applying the sanitizer, place utensils in a wire or plastic draining rack where they will not come into contact with any food or food residue and let them sit until dry.
- For equipment, after applying the sanitizer, let the equipment sit without use until dry.
- Do not use towels for drying because they may re-contaminate equipment and utensils.

Never rinse or perform any other cleaning process after the sanitizing process.

Equipment for Warewashing

Mechanical Warewashing

Most tableware, utensils, and other equipment can be cleaned and sanitized in a warewashing machine. Warewashing machines sanitize by using either hot water or a chemical sanitizing solution.

- Check the machine for cleanliness at least once a day.
- Make sure all detergent and sanitizer dispensers are properly filled.
- Scrape, rinse, or soak items before loading them into the machine.
- Load racks correctly and use racks designed for the items being washed.
- Check temperatures and pressure at least once a day.
- Check each rack as it comes out of the machine for soiled items.
- Air-dry all items.
- Keep your warewashing machine in good repair and always operate in accordance with the machine's data plate and other manufacturer's instructions.

High-Temperature Machines

- The temperature of the final sanitizing rinse must be at least 180°F (82°C). For stationary rack, single temperature machines, it must be at least 165°F (74°C).
- The machine must have a thermometer installed to measure the temperature of water at the manifold, where it sprays into the tank.

Chemical-Sanitizing Machines

- Chemical sanitizing machines often wash at much lower temperatures, but not lower than 120°F (49°C).
- Rinse water temperature in these machines should be between 75°F and 120°F (24°C and 49°C) for the sanitizer to be effective.

Cleaning and Sanitizing in a Three-Compartment Sink

1. Rinse, scrape, or soak all items before washing them in a three-compartment sink.
2. Wash items in the first sink in a detergent solution that is at least 110°F (43°C).
3. Rinse items by immersing or spraying the items in the second sink using clean water that is at least 110°F (43°C).
4. Immerse items in the third sink in hot water or a properly prepared chemical sanitizing solution.
5. Air-dry all cleaned and sanitized items before storing them.

Cleaning In Place Equipment

1. Turn off and unplug equipment before cleaning.
2. Remove food and soil from under and around equipment.
3. Remove detachable parts and manually wash, rinse, and sanitize them or run through a warewashing machine.
4. Wash and rinse all other food-contact surfaces that you cannot remove, then wipe or spray them with a properly prepared chemical sanitizing solution.
5. Keep cloths used for food-contact and non-food-contact surfaces in separate properly marked containers of sanitizing solution.
6. Air-dry all parts, and then reassemble.
7. Sanitize food-contact surfaces handled during reassembly.