Food Plant Sanitation
Section I
Food Borne Illness and Death
1) CDC Estimates – 2002 USA
   A) 5000 Deaths
   B) 200,000 Hospitalizations
   C) 200,000,000 Cases of illness
2) Most are Preventable

A) Proper Refrigeration

B) Proper Food Handling Practices
   - Cutting Boards /Food Preparation Surfaces
   - Hand Washing
   - Animal Contact

C) Raw or Partially Cooked Food

D) Hot Food must be HOT / Cold Food - Cold
3) Organisms Responsible:

A) Salmonella
B) Listeria – Monocytogenes
C) Campylobacter Jejuni
D) E.Coli 0157H7
E) Fecal Coliforms
F) Yersinia
G) Shigella
H) Claustridium Botulinum
I) Mycotoxins & Aflatoxins from Molds
4) Where Are The Concerns?

A) Food Preparation Areas
   • Restaurants
   • Hospitals
   • Schools
   • Catering
   • Homes

B) Food Storage Areas
   • Temperature
   • Conditions
   • Insect / Rodent / Animal Contamination

C) Food Processing Plants

- Meat and Poultry
- Fish and Seafood
- Bakeries
- Dairy Foods & Milk Plants
- Confectionary Plants
Section II
Food Plant Cleanliness
1) Master Sanitation List

Identifies Schedule for Cleaning Entire Plant

- Top to Bottom
- Front to Back
2) SSOP –
Sanitation Standard Operating Procedures
A) What / When / Where / Who / How – Written Procedures with Details

B) Cleaning and Sanitizing

• Cleaning utilizing chemical cleaners diluted in water and applied to surfaces manually or mechanically.

• Sanitizing using chemical sanitizers applied to already CLEAN surface to further reduce the bacterial population.
2) SSOP – cont.

C) Many different chemicals are available.

- Caustic Compounds
- Acid Cleaners
- Quaternary Ammonium Compound (QUAT) - 200 ppm
- Chlorine Compound (Household Bleach) - 200ppm
- Acid Sanitizer (NON-ionic)
- Iodine Compounds
3) Cleaning Chemicals and Sanitizer Control

A. Chemicals must NOT be present in food processing areas while processing.

B. Must be used according to manufacture’s instructions.
   • “If a little is good then more is better” philosophy is WRONG WRONG WRONG WRONG!!!!

C. Verify solution strength and document.
   • Particularly necessary for chemical sanitizers.
4) Preoperative Inspections & Corrective Actions

A. Daily, documented inspection of all areas and equipment are required.
   • Preferably before machinery is assembled.
   • Application of final sanitizer solution after preoperative inspection.

B. Equipment disassembly is required.
   • If it was made to come apart for cleaning, it MUST be taken apart and cleaned. EVERY DAY!

C. Biofilms.
5) Verification of Cleaning Effectiveness

A. Visual and Tactile Inspection

B. Chemical Testing (Bioluminescence)

C. Microbiological Testing
   • Environmental
   • Food Contact Surfaces
6) Operational Housekeeping

A. No Product on floor
B. No Messes or Clutter
C. No Trash Cans Overflowing
D. No Bad or Sour Odors
7) Self Inspections

A. Conducted with Documentation every month.

B. Take a close look at the operation for HAZARDS or potential problems.
Section III
Pest Control
1) Use a trained, licensed, insured pest control operator.

A. Must use approved insecticides and rodenticides for application in food plants.

B. Frequency of service should be a minimum of once a month.
2) Outside Premises Management

A. Clean areas around building perimeter.
B. Remove all junk and trash.
C. Remove all vegetation from around building.
D. Half meter of clean gravel or sand, concrete, or blacktop around building.
E. Bait stations approx. every 15 meters.
F. Must use solid block bait. Do NOT use grain.
3) Inside Premises Management

A. No poison bait stations permitted anywhere inside building.

B. Traps and glue boards are permitted in:
   Warehouse / Cold Storage / Employee Welfare Area / Offices
   Trapping devices are NOT permitted in processing areas.

C. If insecticides are used in the plant, all equipment must be re-washed before use.

D. ILT’s – Insect Light Traps are NOT recommended for processing areas.
4) Pest tight doors and entrance closures.
   • ALL holes to the outside MUST be sealed off.
   • Holes or penetrations in walls, ceiling, floors, and pipes must be sealed off.
   • Access and HIDING places for pests must be blocked.

5) NO pest control chemicals stored in plant.
   • If they must be kept on premises, they should be stored in a locked, access controlled area.

6) Pest control operator documentation.
   • The pest control operator should keep detailed reports. Copies submitted to plant office.
Food Plant Sanitation

Thank You