

# **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) Clostridium 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

## 4) Where Are The Concerns? – Cont.

### 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!!!!
- 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**