Principles

• Food Safety is a top priority
• A foodborne illness because of poor sanitation would be a very dark mark on the organic industry.
• Cleaning and sanitizing practices can be implemented that are compatible with organic principles
Facility Cleaning/Sanitizing

• GMP
  – Good Manufacturing Practices
• Cleaning
  – Removing unwanted materials
• Sanitizing
  – Killing microbes
• HACCP
  – Hazard Analysis and Critical Control Points
GMP

• Procedures to insure effective cleaning/sanitizing
  – Standard practices with additional rinses
  – Testing to insure no residues
  – May require more work than routinely done

• Provide a safe (microbially) food supply
  – Conventional industry less concerned with chemical safety
Cleaning

• Prevent co-mingling
  – OSP should address this

• Prevent contamination
  – Standard cleaning practices with extra rinses
  – Tests to insure no residues

• Don’t scrimp on cleaning/sanitizing
  – Possible to insure good cleaning as well as organic integrity
Sanitizing

• National List items (§205.605)
  – Acidified sodium chlorite
    • Food contact surfaces
  – Chlorine materials
    • Cl, ClO₂, hypochlorite, hypochlorous acid
  – Hydrogen peroxide
  – Ozone
  – Peroxyacetic acid
    • Food contact surfaces

• Quaternary ammonium compounds (Quats)
  – Not specifically listed nor restricted
HACCP

• May be incorporated into OSP
  – Or vice-versa

• CCP’s
  – Critical control points
  – Generally unchanged for organic

• OCP’s
  – Organic control points
  – Mostly around contamination/co-mingling
Materials/Processes

- Chlorine cmpds
- Bromide
- Alcohols
- Peroxyacetic cmpds
- Hydrogen peroxide
- Acids (mineral)
- Ionics (TSP…)
- Fatty Acids (glycerin)
- Organic acids
- Quats
- Iodophors
- Soaps
- Gases (ClO₂, O₃, EtOx…)
- UV or IR light
- Essential oils
- Microorganisms
- pH adjusters
- Silver
Questions to Address

• Toxicity
• Environmental mfg. issues
  – Waste disposal issues
• Contact time
• Nanotech
• Resistance
• Broad vs narrow spectrum
• Hierarchy of use
• Contact
  – Surfaces vs direct food contact
• Cross resistance to antibiotics
OFPA Criteria

• Detrimental interactions
• Toxicity
• Environmental issues
• Human health
• Biological effects
• Alternatives
• Compatibility w/organics
OFPA Synthetic Evaluation

• Natural alternatives
• Environmental impact
  – Manufacturing and disposal
• Nutritional quality
  – Health impacts
• Preservative?
• GRAS
• Essential?