

**SANITATION STANDARD OPERATING PROCEDURE – Adulteration Prevention****INTRODUCTION**

Food, food packaging materials and food contact surfaces must be protected from adulteration with physical or chemical hazards. Contaminants may include water, cleaners, sanitizers, lubricants, pesticides, metal, rubber and plastic. The inclusion of unintended ingredients and undeclared allergens is also considered to be product adulteration.

**GENERAL ADULTERATION PREVENTION PROCEDURES:**

1. Review all piping to ensure that products are not being contaminated.
  - a. Look for lines where products, or cleaning and sanitizing solutions could become trapped.
  - b. Examine drain lines to make sure they are draining freely except during use.
  - c. Monitor for cross-connections between raw and pasteurized lines, between product lines and cleaned-in-place (CIP) circuits.
2. Inspect the sweet water system and any equipment that utilizes sweet water for leaks and cracks. Monitor the water for harmful contaminants.
3. When alterations are made in the process piping or equipment, change the blueprints to reflect those alterations.
4. As part of a routine preventative maintenance program examine air valves, screens, gaskets, seals, o-rings, and other metal, rubber and plastic parts on processing equipment for wear.
5. Change the filters on the air blow system frequently.
6. Use extreme caution when reworking products.
  - a. Ensure that all reclaimed products have been pasteurized before reuse.
  - b. Make certain that reclaimed product is not used in the same lines or processing equipment as pasteurized product unless they have been cleaned and sanitized between uses.
  - c. Do not reclaim products from damaged or dirty containers.
  - d. Do not reclaim products that are beyond the normal shelf life.
  - e. Do not reclaim products that have been held at elevated temperatures.
  - f. Do not reclaim products that have been exposed to chemical or biological contamination.

**ALLERGEN CONTROL PROCEDURES:**

1. Utilize product and ingredient labels.
  - a. Ingredient labels identifying all allergenic foods must be on all containers offered for sale. The precautionary “contains” statement must be clearly visible after the ingredient statement.
  - b. Record all ingredients and their lot number on the records of manufacture as well as the lot numbers of all food contact packaging materials.
  - c. Date coding must be shown on all products.
  - d. Ensure that packaging labels and ingredient labels match.
  - e. All new products and ingredients must be reviewed for food allergens before their initial use.
2. Cleaning and sanitation procedures.
  - a. Parts of processing equipment that require manual cleaning should be thoroughly inspected prior to use.
  - b. The CIP system must be monitored for proper operation, including time, temperature, chemical concentration and flow rate. Adjust chemical washes when needed to remove heavy residues. Document the results from all chemical titrations.
  - c. Daily equipment inspections should include looking for stuck valves, incomplete drainage of tanks and improper line hook-ups.
  - e. Verify the effectiveness of cleaning and sanitizing. ATP swabs can be used to monitor surface cleanliness, and milk protein detection swabs can be used prior to manufacturing non-dairy products.

- 3. Prevent cross-contamination.
  - a. Allergen containing products should be produced and packaged on separate days from non-allergen containing products. If this is not possible, they should be the last products run on a production day that also packages non-allergen products.
  - b. After processing an allergen containing product the equipment must be cleaned and inspected prior to use with non-allergic products.
  - c. Segregated storage of ingredients and utensils can prevent cross-contamination.
- 4. The use of rework should be carefully monitored.
  - a. Products due to be reworked must be clearly labeled and stored at less than 40°F until used.
  - b. Products that contain allergens should only be reworked into products containing exactly the same allergen.

**RECORDKEEPING**

- 1. Records of manufacture list all ingredients and packaging materials as well as their lot numbers. These are retained for at least two years.
- 2. Certificates of analysis for ingredients and packaging materials should be obtained from suppliers.
- 3. Record the results from the cleaner and sanitizer concentration assays on the weekly test form

**REFERENCES**

- 1. Berkey Creamery Food Allergen Awareness Plan (most recent revision)
- 2. SSOP 003 Cross-Contamination Prevention

The following individual is responsible for implementation of this SSOP and has the overall authority on-site:

Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_