

HACCP Plan

Hazard analysis critical control point (HACCP) is a preventive approach to food safety. It identifies food safety hazards in the food production process and designs measurements to reduce those hazards to a safe level.

HACCP includes having a written plan that addresses identified critical control points (CCPs) where illness or injury is reasonably likely to occur in the absence of the hazard's control.

Submit the completed HACCP plan and provide all documents relating to your establishment's HACCP plan to the Department of Health and Human Services, Food and Lodging Unit by email (foodandlodging@nd.gov), fax (701-328-0340), or mail (600 E. Boulevard Ave., Dept. 325, Bismarck, ND 58505-0200). If you have further questions, please contact us at: 701-328-1291.

Establishment information

Establishment Name: Jelly and Jam XXXX	Date: MM/DD/YYYY
Establishment Address: 123 Ave.	
City, State, ZIP code: Any City, ND, XXXXX	License Number: XXXX
Owner/Corporate Name: ABC Jams	
Mailing Address (if different): same as establishment	
City, State, ZIP code:	
Primary Contact for HACCP Plan: General Manager	Phone: XXX-XXX-XXXX
Primary Contact Email Address: gmgr@email.com	

HACCP team

Name	Job Title or Description
<i>Joe Smith</i>	<i>General Manager</i>
<i>Sue Smith</i>	<i>Assistant Manager</i>
<i>Ted Smith</i>	<i>Jelly Maker</i>
<i>Frank Smith</i>	<i>Quality Control Officer</i>

Template adapted from the Minnesota Department of Health

Reason for this HACCP plan*

Please check one of the following:

- New HACCP plan
- Modification of existing HACCP plan

Activity or food category

Please check one or more of the following:

- Curing food
- Custom processing animals for personal use
- Operating and maintaining molluscan shellfish tanks
- Reduced oxygen packaging (ROP) - ROP methods include vacuum packaging, cook-chill, sous vide, modified atmosphere packaging (MAP), and controlled atmosphere packaging (CAP)
- Smoking food as a method of food preservation rather than as a method of flavor enhancement
- Sprouting seeds or beans
- Using food additives or adding components, such as vinegar, to preserve food rather than as a method of flavor enhancement, or to render the food so that it is not time and temperature control for safety food
- Other:

*Please consult with the Regulatory Authority to determine if a variance is required.

Product details

Provide product name, ingredients list, recipe/directions, and process description. Additional scientific documentation, as required by the Regulatory Authority, addressing the food safety concerns involved for this HACCP activity shall be provided.

Product: Rhubarb-Strawberry Jam With Pectin

Ingredients: *Rhubarb, Strawberry, Sugar, and Pectin*

Recipe/directions:

- 1 cup cooked red-stalked rhubarb (1 pound rhubarb and ¼ cup water)
- 2½ cups crushed strawberries
- 6½ cups sugar
- 6 oz. liquid pectin

Yield: About 7 or 8 half-pint jars

Process description:

Preparation: Wash rhubarb and slice thin or chop; do not peel. Add water, cover and simmer until rhubarb is tender (about one minute). Sort and wash fully ripe strawberries: remove stems and caps. Crush berries.

Production: Measure prepared rhubarb and strawberries into a kettle. Add sugar and stir well. Place on high heat and stirring constantly, quickly bring to a full boil with bubbles over the entire surface. Boil for one minute, stirring constantly. Remove from heat and stir in pectin. Skim. Fill hot jam immediately into hot, sterile jars, leaving ¼-inch head space. Wipe rims of jars with a dampened clean paper towel; adjust the lids.

Intended use and consumer

Please check one or more of the following to indicate how the product will be used.

- Ready-to-eat; served in the food establishment to consumers.
- Ready-to-eat; distributed to satellite location; served at satellite location to consumers.
- Ready-to-eat; packaged and sold in the food establishment for home use.
- Ready-to-eat; packaged and sold wholesale to another food establishment for retail sale.
- Raw; served in the food establishment to consumers.
- Raw; distributed to satellite location; served at satellite location to consumers.
- Raw; packaged and sold in the food establishment for home use.
- Raw; packaged and sold wholesale to another food establishment for retail sale.
- Other:

Shelf life

For each storage method included in this HACCP plan, indicate the maximum time products will be stored.

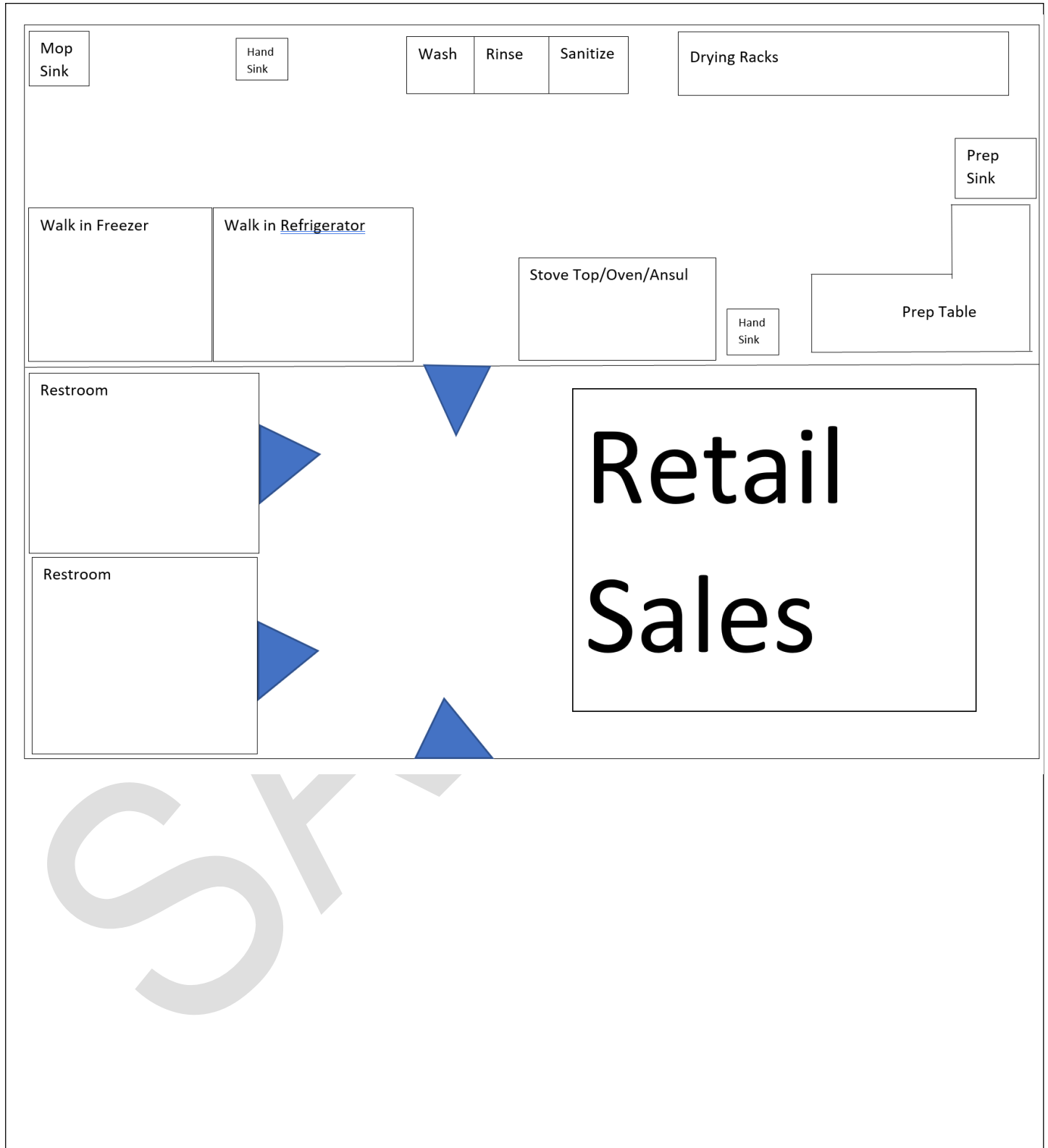
A product assessment of processed jam using the indicated recipe and directions determined that the shelf life of the product is 12 months

or

Room temperature storage: Best if used by 6 months of production date

Layout of production area

Provide a hand drawing, blueprint, or other diagram of the production area. Include all areas involved with this HACCP activity. Important details may include: sink types and locations, equipment locations, receiving, storage, preparation, and processing areas.



Equipment and materials

List all equipment and materials used for this HACCP activity. Include manufacturer names and model numbers. Attach specification sheets, if available.

Stoves: Make ABC, Model 123

Canning Rack: Make ABC, Model 123

Glass Preserving Jars, Lids, & Bands: Brand ABC

Kitchen Utensils, Ladle, Funnel, Knives, & Slicer: Brand ABC

Jar Lifter, Magnet, Measuring Cups & Spoons: Brand ABC

Walk-In Cooler: Make ABC, Model 123

Timer: Make ABC, Model 123

pH Meter: Make ABC, Model 123

Distilled Water: Brand ABC

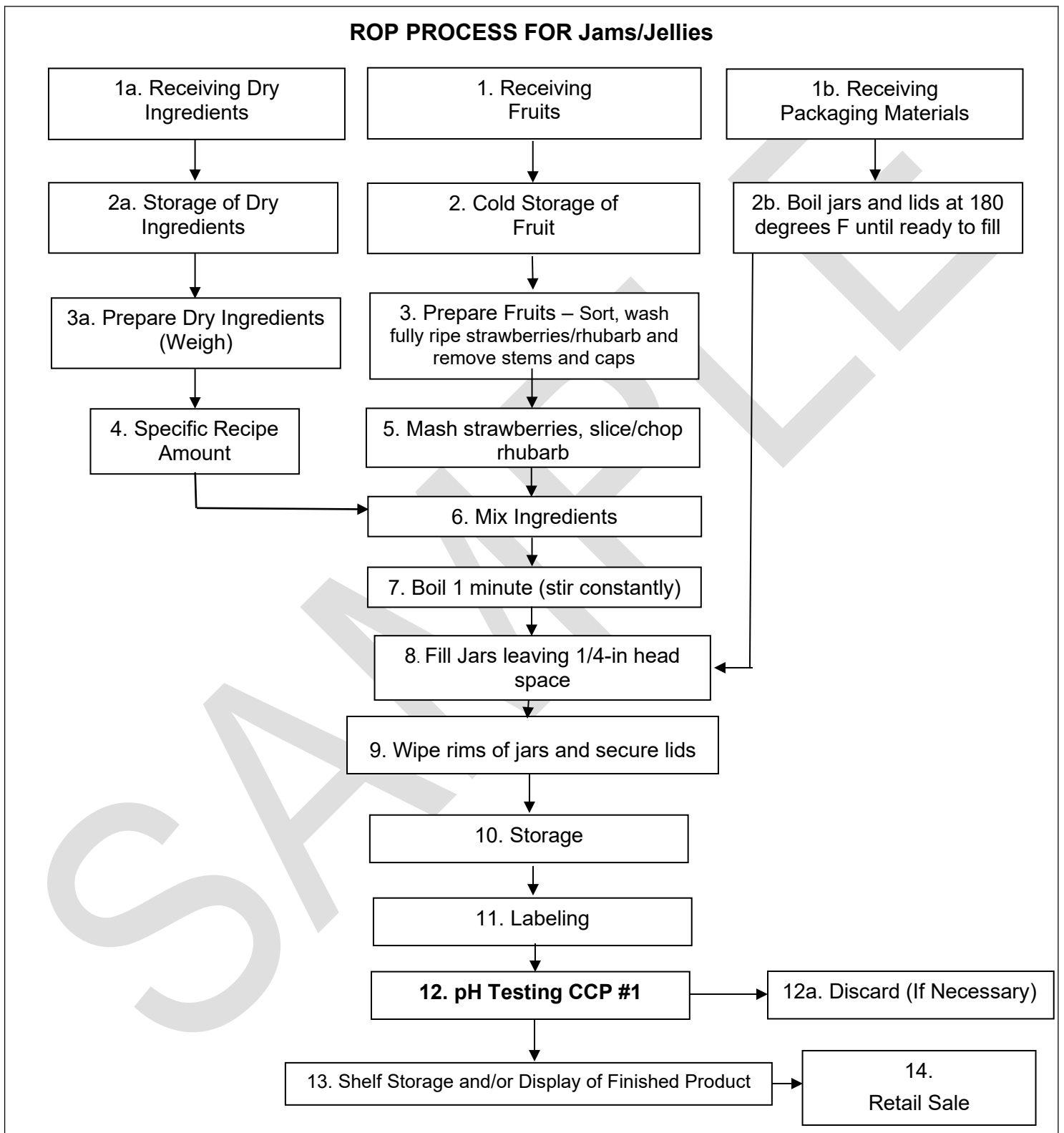
Buffer Solutions 4.0 & 7.0: Brand ABC, Lot 123

Blender: Make ABC, Model 123

Clear Plastic or Metal Blender Cups for pH Testing

Food flow diagram

Provide a written flow diagram for foods covered in this HACCP plan. Identify process steps from receiving through service. Identify the critical control points (CCPs) on the flow diagram.



Food flow, procedure, and hazard analysis adapted from the City of Minneapolis HACCP Plan Template.

Hazard analysis

Use the chart below to conduct and document the hazard analysis. The HACCP plan shall include CCPs for each identified hazard.

Step from food flow diagram	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
1. Receiving Fruits	B – <i>Clostridium botulinum</i> C – None P – None	Yes	Fresh fruit is known to contain pathogens	Fruit will be washed properly	No
1a. Receiving Dry Ingredients 1b. Receiving Packaging Materials	B – None C – Deleterious Chemicals P – Foreign Material	No	Dry ingredients will be purchased from approved sources. Non-food packaging materials might have been treated/washed with chemicals not suitable for food contact surfaces	Visual inspection of dry ingredients upon receipt Use of food grade packaging only	No
2. Cold Storage of Fruits	B – <i>Clostridium botulinum</i> C – None P – None	Yes	Potential Growth of Pathogens	All fruits will be washed properly before use	No

Step from food flow diagram	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
<p>2a. Storage of Dry Ingredients</p> <p>2b. Storage of Packaging Materials</p>	<p>B – None</p> <p>C – Chemical Contaminants</p> <p>P – Foreign Material</p>	<p>No</p>	<p>C – Proper chemical storage makes contamination unlikely</p> <p>P – Visible foreign material that could compromise product safety; rodent droppings and/or insects</p>	<p>C – All chemicals are stored in an area separate from dry ingredients and packaging materials</p> <p>P – Visual inspection of packaging materials to ensure no foreign material is present</p>	<p>No</p>
<p>3. Prepare Fruits – Sort, wash fully ripe strawberries/rhubarb and remove stems and caps</p>	<p>B – Clostridium botulinum</p> <p>C – None</p> <p>P – None</p>	<p>Yes</p>	<p>Potential introduction and/or growth of pathogens</p>	<p>All fruits will be washed thoroughly prior to cooking</p> <p>SSOPs for handwashing and cleaning of equipment</p>	<p>No</p>
<p>3a. Prepare Dry Ingredients</p>	<p>B – None</p> <p>C – Chemical Contaminants</p> <p>P – Foreign Material</p>	<p>No</p>	<p>C – Proper chemical storage makes contamination unlikely</p> <p>P – Visible foreign material that could compromise product safety; rodent droppings and/or insects</p>	<p>C – All chemicals are used in an area separate from dry ingredients</p> <p>P – Visual inspection of dry ingredients to ensure no foreign material is present</p>	<p>No</p>

Step from food flow diagram	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
4. Weigh/measure Dry ingredients	B – Pathogens - Clostridium botulinum C - Nitrites P- None	Yes	To ensure safety of the product that was tested at this specific recipe	If recipe is not followed exactly it will be discarded and the process starts over	No
5. Mash strawberries and slice/chop rhubarb	B – None C – None P – Metal	No	In house inspection of processing equipment will help safeguard against metal contamination	SOPs	No
6. Mix Ingredients	B – None C – None P – Metal	No	In house inspection of processing equipment will help safeguard against metal contamination.	SOPs	No
7. Boil ingredients	B – Clostridium botulinum C – None P – None	Yes	Potential Growth of Pathogens	Boil all ingredients to a rolling boil for 1 minute	No

Step from food flow diagram	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
8. Fill Jars	<i>B – Clostridium botulinum, Listeria monocytogenes</i> C – None P – None	Yes	Fresh fruit is known to contain pathogens	Fill jars leaving 1/4inch head space	No
9. Wipe Rims and secure lids	<i>B – Clostridium botulinum, Listeria monocytogenes</i> C – None P – None	Yes	Residue left on the rims will prevent proper sealing of the jars	Visual inspection of jars to ensure jar rims are clear of any residue	No
10. Storage	<i>B – Pathogens: Clostridium botulinum, Listeria monocytogenes</i> C – None P – None	Yes	It takes time for all portions of the processed product to reach a finished product pH of below 4.2	All jars from each batch will be stored for at least seven days from the date prepared	No
11. Labeling	<i>B – Clostridium botulinum, Listeria monocytogenes</i> C – Allergens P – None	Yes	Improperly date marked products will result in outdated or unsafe products Improperly labeled products will result in allergens risks	Each package will be properly labeled with shelf life of 12 months Each package will be properly labeled with ingredient information to include allergens	B – No C – No

Step from food flow diagram	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
12. pH Testing (CCP #1)	<p><i>B – Pathogens: Clostridium botulinum, Listeria monocytogenes</i></p> <p><i>C – None</i></p> <p><i>P – None</i></p>	Yes	<i>Finished product pH of below 4.2 controls the pathogen growth and toxin formation</i>	<i>Finished product pH below 4.2</i>	Yes: CCP 1
12a. Discard (If Necessary)	None	N/A	N/A	N/A	N/A
13. Shelf Storage and/or Display of Finished Product	<p><i>B – None</i></p> <p><i>C – None</i></p> <p><i>P – Chemical contaminants</i></p>	No	<i>Proper chemical storage makes contamination unlikely</i>	<i>All chemicals are stored in an area separate from jams</i>	No
14. Retail Sale	None	N/A	N/A	N/A	N/A

HACCP plan CCP chart

Complete the chart below. Identify each CCP and describe: the critical limit, method and frequency for monitoring and controlling the CCP, method and frequency for person in charge (PIC) to verify that food employees are following standard operating procedures (SOPs) and monitoring CCPs, corrective action when critical limits are not met, and how records are maintained.

Critical Control point (CCP)	Significant hazard(s)	Critical limits for each hazard	Monitoring				Corrective action(s)	Records	Verification
			What	How	Frequency	Who			
CCP #1 pH Testing	<p><i>B – Pathogens: Clostridium botulinum, Listeria monocytogenes</i></p> <p><i>C – None</i></p> <p><i>P – None</i></p>	<i>pH of below 4.2</i>	<i>pH of finished product</i>	<p><i>Use a pH meter</i></p> <p><i>Follow SOPs for preparing product slurry, calibrating pH meter, and testing pH</i></p>	<i>Each batch</i>	<i>Designated food worker</i>	<p><i>If product slurry does not meet critical limit, the batch will be discarded</i></p> <p><i>Identify and retrain employee(s) on how to ensure that critical limits are met</i></p> <p><i>Record corrective actions on the Thermal Processing and pH Testing Log</i></p>	<i>pH Testing, and Labeling Log</i>	<p><i>PIC will review all records within seven days of completion</i></p> <p><i>All employees will use and maintain equipment per manufacturer's specifications</i></p>

Standard Operating Procedures (SOPs)

Include SOPs that describe how to conduct procedures specific to this HACCP activity. SOPs necessary for this HACCP activity may include: maintenance of specialized equipment (pH meter calibration, cleaning and sanitizing of equipment), and employee training (monitoring, corrective action, record-keeping procedures, and proper formulation of food additives).

PROCEDURE FOR CANNING JAMS/JELLIES

1. **Receiving Fruits:** *Fruits will be obtained or purchased from an approved source and received. Verify products are in good condition, safe, and unadulterated.*
 - 1a. **Receiving Dry Ingredients:** *Inspect dry ingredients upon receipt to verify that they are intact and in good condition. Reject dry ingredients that are not in good condition.*
 - 1b. **Receiving Packaging Materials:** *Food grade packaging will be used for the ROP process. Inspect packaging upon receipt to verify that it is intact and in good condition.*
2. **Cold Storage of Fruits:** *All commercially processed fruits requiring temperature control for safety will be immediately stored in coolers at 41°F or less or freezers and maintained frozen in a solid state; whole intact fruits may be stored at room temperature.*
 - 2a. **Storage of Dry Ingredients:** *Non-perishable products are stored in a clean location that is separated from any potential sources of contamination.*
 - 2b. **Storage of Packaging Materials:** *Non-perishable products are stored in a clean location that is separated from any potential sources of contamination.*
3. **Prepare Fruits – Sort, wash fully ripe strawberries/rhubarb and remove stems and caps:** *Assemble materials necessary for the process in the work area. Visually inspect all equipment and utensils for foreign material and/or metal contamination prior to use. Wash hands prior to washing the fruits then slice/chop rhubarb and remove stems and caps from strawberries.*
 - 3a. **Prepare Dry Ingredients:** *Review the recipe to confirm that all required ingredients are on hand.*
4. **Weigh/Measure Dry Ingredients:** *Weigh/measure out specific ingredients identified in the recipe.*
5. **Mash/Slice/Chop:** *Mash the strawberries and chop/slice the rhubarb.*
6. **Mix Ingredients:** *Combine fruits with dry ingredients. Mix well.*
7. **Cook :** *Bring all ingredients to a rolling boil for 1 minute.*

8. **Fill Jars:** Fill jars leaving ¼ inch of head space.
9. **Wipe Rims of Jars/Secure Lids:** Wipe the rims of the jars and visually inspect residue has been removed. Secure the lids on the jars.
10. **Storage:** All jars from each batch will be stored for at least seven days from the date prepared.
11. **Labeling:** Properly label each package with name of product, product net weight, business name and physical address including zip code, and allergen information. Include use-by date that is 12 months from date of reduced oxygen packaging per product assessment.
12. **pH Testing (CCP #1): pH Testing:** Follow pH Testing SOP for calibration of pH meter, preparation of product slurry, and calibration of pH meter.
 - a. **Critical Limit:** pH below 4.2
 - b. **Monitoring:** Use a pH meter to test one jar from each batch.
 - c. **Corrective Action:** If product slurry does not meet critical limit, the batch will be discarded.
 - a. Identify and retrain employee(s) on how to ensure that critical limits are met. Record corrective actions on the Thermal Processing and pH Testing Log.
 - d. **Records:** Record all required information on the Thermal Processing and pH Testing Log. Maintain records for at least one year.
 - e. **Verification:** PIC will verify that designated employees have met the critical limit and sign off on Thermal Processing and pH Testing Log within seven days of completion. All food workers shall use and maintain equipment per manufacturer's specifications.
- 12a. **Discard (If Necessary):** If CCP 1 is not met, discard the batch.
13. **Shelf Storage and/or Display of Finished Product:** If storing, place ROP packages in dry storage area. If intended for display for retail sale, place ROP packages on display shelves.
14. **Retail Sale:** Product is purchased by consumer.

PROCEDURE FOR CLEANING AND SANITIZING OF EQUIPMENT

Food-contact equipment and utensils are cleaned every four hours if in use. Non-food-contact surfaces are cleaned at a frequency necessary to prevent accumulation of soil residues.

1. **Pre-cleaning** – *Equipment and utensils are pre-cleaned by pre-flushing, presoaking, or scraping as necessary to eliminate excessive food debris.*
2. **Washing** – *Equipment and utensils are washed in soapy water to remove or completely loosen soils using a manual method. Only approved chemicals are to be used in this process. Mix concentration according to manufacturer's recommendations.*
3. **Rinsing** – *Washed utensils and equipment are rinsed in water to remove soapy residue prior to sanitizing.*
4. **Testing Sanitizer Solution** – *Select appropriate test strip (chlorine, quaternary ammonia, or iodine) and test sanitizing solution prior to use daily to ensure appropriate concentration.*
5. **Sanitizing** – *After being washed and rinsed, equipment and utensils are sanitized with an approved chemical by immersion. Concentration and exposure times are important to ensure effectiveness of the chemical. Refer to the manufacturer's label for concentrations and times.*
6. **Air Drying** – *Allow all cleaned and sanitized equipment and utensils to air dry before stacking or storing. Do not use towels.*

**When a mechanical warewashing machine is used, follow manufacturer's instructions for use.*

PROCEDURE FOR EMPLOYEE TRAINING

Employees will be trained on each step of the food flow chart. Particular attention will be made to critical control points and proper documentation of logs. Employee training will be documented on the Employee Training Log. Employees will not be allowed to process jams/jellies independently until Employee Training Log has been completed.

PROCEDURE FOR THERMOMETER CALIBRATION

Thermometers will be calibrated weekly. The designated food worker must record the calibration temperature and corrective action taken each time a thermometer is calibrated on the Thermometer Calibration Log. Thermometers intended for measuring hot temperature items shall be calibrated in hot water, while those used for cold temperatures shall be calibrated in ice water. The Thermometer Calibration Log will be reviewed, signed and dated by the PIC monthly. The log shall be maintained for a minimum of one year.

Prerequisite programs

Describe facility-wide considerations implemented in all phases of the food operation that allow active managerial control over personal hygiene and cross-contamination. Include standard sanitation operating procedures (SSOPs) that address the following: how employees comply with ND Food Code by preventing contamination from hands, minimizing cross contamination, cleaning and sanitizing procedures, and restriction or exclusion of ill employees. Include a description of the training programs that ensure food safety in the operation.

PROCEDURE FOR EMPLOYEE HEALTH & HYGIENE

1. *Hands are to be thoroughly washed for 20 seconds in a designated hand sink with soap and water, paying particular attention to the areas underneath the fingernails and between the fingers by scrubbing thoroughly. Dry with single use towels. Hand washing is to be done at the following times:*
 - *After using the toilet, in the toilet room*
 - *After coughing, sneezing, using a tissue, using tobacco, eating or drinking*
 - *After handling soiled equipment or utensils*
 - *Immediately before engaging in food preparation activities*
 - *During food preparation activities necessary to remove soil and prevent cross contamination*
 - *When switching between raw and ready-to-eat foods*
 - *Other times as needed to maintain good sanitation*
2. *Fingernails must be kept trimmed, filed, free of nail polish, and maintained so the edges are cleanable and not rough. Artificial nails are prohibited.*
3. *Eating and drinking is prohibited in areas where contamination of exposed food, clean equipment, utensils, unwrapped single service and single use articles could occur. A food employee may drink from a closed beverage container as long as it is handled to prevent contamination. Smoking and other uses of tobacco are prohibited.*
4. *Effective hair restraints must be worn in processing areas.*
5. *Clean outer clothing must be worn each day and changed as often as necessary throughout the day (when moving from a raw food operation to a ready-to-eat food operation). Footwear is to be kept clean. Aprons used by employees are to be hung in a designated area when not in use. They are not to be worn in the toilet area, eating areas, and locker rooms.*
6. *No jewelry (except a wedding band or other plain ring) is allowed during handling of food.*
7. *Food employees shall report to the person in charge when they have a symptom caused by illness, infection, or other source that is:*
 - *Associated with diarrhea, vomiting, or other acute gastrointestinal illness*
 - *Jaundice*
 - *A boil, infected wound, or other lesion containing pus that is open or draining unless: if on the hands and wrist, unless a finger cot or other impermeable cover protects the lesion and a single use glove is worn if on exposed portions of the arms, the lesion is protected by an impermeable cover.*

The person in charge shall impose the proper restrictions and exclusions and record on the Employee Illness Log.

Record-keeping

Attach all blank record-keeping forms employees will use for the processes covered in this HACCP plan. Procedures to monitor all SOPs (daily thermometer accuracy log, pH meter calibration log) shall be included. Procedures to monitor all CCPs (temperature logs for cooking, cooling, and storage; product pH testing log; corrective action logs; etc.) shall be included. The PIC shall verify all record-keeping documents by reviewing, dating, and initialing the logs.

SAMPLE

Employee Training Log

Name of Employee: _____

Date of Hire: _____

Documentation of Employee Training		
<i>Topic</i>	<i>Trainee Date & Initials</i>	<i>Trainer Initials</i>
Receiving Fruits, Dry Ingredients, & Packaging Materials		
Cold Storage of Fruits		
Storage of Dry Ingredients & Packaging Materials		
Prepare Fruits		
Weighing Dry Ingredients		
Mashing/slicing/chopping fruits		
Mixing Ingredients		
Boiling Ingredients		
Filling Jars		
Cleaning of jars		
Storage		
Labeling		
pH testing (CCP #1)		
Discard (if necessary)		
Shelf Storage and/or Display of Finished Product		
Retail Sale		
Thermometer Calibration		
Scale Accuracy		
Cleaning & Sanitizing Equipment		
Employee Health & Hygiene		
Record Keeping		

I verify that I am competent to perform all duties listed above.

Employee Signature and Date: _____

I have reviewed this training document and verify that this employee is competent to perform all duties listed above.

Employee Signature and Date: _____

Employee Illness Log

Instructions: This log should be used to track employee absences due to illness.

- Employees are required to notify the Person in Charge (PIC) of any of the following:
 - Symptoms of vomiting, diarrhea, jaundice, sore throat with fever, and/or infected wounds
 - Diagnosis from a health practitioner of norovirus, hepatitis A, *Shigella*, *Salmonella* Typhi, nontyphoidal *Salmonella*, or Shiga toxin-producing *E. coli*. The PIC is required to record all reports of symptoms and diagnoses and to notify the Regulatory Authority of any of the diagnoses.

Report date	Employee name	Vomiting*	Diarrhea*	Jaundice	Fever	Respiratory (cough, sore throat, runny nose)	Comments or additional symptoms	Date returned to work	Diagnosed with a pathogen? (see list above)	If diagnosed, 1-800-472-2927 or local health agency contacted?
02/20/2020	John Doe	X	X				Sent home	6/15/2019	Yes – norovirus	Yes

***Employees with diarrhea or vomiting CANNOT RETURN TO WORK for at LEAST 24 HOURS after symptoms resolve.**