

HENNEPIN COUNTY

PUBLIC HEALTH

2024 HACCP – Reduced Oxygen Packaging (ROP)

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.

2024 HACCP PLAN REVIEW FEES*

Initial Plan Review Fee: \$401.00
Annual HACCP Audit Fee: \$201.00

**Make checks payable to Hennepin County Treasurer*

SUBMISSION CHECKLIST

- Application
- Plan
- Plan Fee (\$401.00) **license fee is separate and will be assessed upon plan approval*

BUSINESS (ESTABLISHMENT) INFORMATION

Establishment Name		Phone	
		MN	
Address	City	State	Zip

LICENSE HOLDER (OWNER) INFORMATION

Owner Name		Phone	
Address <i>(all correspondence will be sent to this address)</i>		City	State Zip

RESPONSIBLE AGENT FOR PLAN REVIEW (if other than owner)

- Operator Contractor Designer Other: _____

Responsible Agent Name		Phone	
Address	City	State	Zip

ADDITIONAL INFORMATION

- Basic Procedure Info: Do you regard any info in this application/plan as Trade Secrets?
 New Revised Yes No

HACCP PLAN CONTACT INFORMATION

Signature: _____ **Date:** _____

Please PRINT the following information:

Name: _____ Phone: _____

Email: _____

Reduced Oxygen Packaging (ROP) HACCP Submittal Information

Is new construction or remodeling taking place?

- Yes
- No

If yes, was this ROP HACCP plan submittal provided along with the construction plan review submittal?

Reminder: HACCP plan review and fee is separate from construction plan review.

- Yes
- No

For construction plan review submittal requirements, please contact us at (612) 543-5200 or

<https://www.hennepin.us/business/licenses-permits/food-beverage-lodging>

What is the reason for this ROP HACCP plan submittal?

- New ROP HACCP plan
- Modification of existing approved ROP HACCP plan

Have you previously submitted this ROP HACCP plan to a regulatory authority (i.e. MDH, MDA, city or county health department) in the state of Minnesota?

- Yes
- No

If yes, please provide the following:

<u>Regulatory Authority</u>	<u>Food Establishment(s)</u>

Activity or Food Category

Please select one of the following processes that this ROP HACCP plan covers. ROP is allowed under [Minnesota Rules, part 4626.0415](#) or [Minnesota Rules, part 4626.0420](#). ROP includes vacuum packaging, modified atmosphere packaging (MAP), controlled atmosphere packaging (CAP), cook-chill and sous-vide of time/temperature control for safety food (TCS).

- Raw meat, raw poultry, raw vegetables
- Fish that is frozen before, during & after packaging
- Cook-chill process *(if holding ROP product less than 48hrs contact department before submitting to discuss process with HACCP reviewer)*
- Sous-vide process
- Cheese
- Cured meats
- Other:



Procedural Control Measures

Please select the control measures you will be using to control pathogen growth for this ROP HACCP process

All ROP HACCP processes must:

- Maintain product at 41°F or below

Your ROP HACCP process must also meet at least one of the following:

- Have a_w of 0.91 or less
- Have pH of 4.6 or less
- A meat or poultry product cured at USDA regulated plant and is received in an intact package
- A food with a high level of competing organisms such as raw meat, raw poultry, or raw vegetables
- Fish that is frozen before, during and after packaging
- Packaged TCS food using cook-chill or sous-vide process

If a food establishment packages TCS food using an ROP method that does not meet the double control measures as described above, then **BOTH** an ROP HACCP plan **AND** a variance are required. If this applies to your establishment, please select one of the following for this HACCP ROP plan submittal:

- Meat or poultry product cured on site at the food establishment, and then packaged on site using an ROP method
- Meat or poultry product cured off site at a satellite location of the same business entity, and then packaged on site using an ROP method
- Uncured ready-to-eat meat or poultry product
- Other:

Variance Request

If you are proposing to implement an operation, procedure, and/or equipment that does not comply with State Rules and County ordinances, a variance from the regulations may be requested. The variance request process includes the following (minimum):

1. Complete a Variance Request application (applications at our Hopkins office or website: www.hennepin.us/business/licenses-permits/food-beverage-lodging)
2. State regulation from which you are requesting a variance.
3. Reason/need for variance from the regulation (financial reasons will not be accepted).
4. Provide documentation that supports the variance will not negatively impact food safety, public health, or employee safety. (This must also show that no other accepted operation, practice, technique and/or equipment can be substituted or is available.)



Product Details

Provide product names, ingredient lists, formulations or recipes, and other information to describe the methods that address the food safety concerns of this HACCP activity. You must include all chemical preservatives, such as cure or "pink salt" and brand name, in the ingredient lists.

Upon request of the regulatory agency, you must provide additional scientific documentation or other information (e.g., source of recipe used, processing authority letter) that demonstrates food safety is not compromised by the proposal.

Activity or Food Category	Name(s) of Product(s)
ROP of raw meats, raw poultry, raw vegetables	
ROP of fish that is frozen before, during, and after packaging	
ROP of meats or poultry products cured at USDA regulated plant and is received in an intact package	
ROP of meats or poultry products cured on site at the food establishment	
ROP of meats or poultry products cured off site at a satellite location of the same business entity	
Cook-chill process	
Sous-vide process	
ROP of cheese	
Other (<i>describe</i>):	
Other (<i>describe</i>):	



Recipe and Methods Used



Materials and Equipment

List all materials and equipment used specifically for this specialized process. Provide manufacturer information specific and relevant to materials and equipment used to verify, control or meet the critical limits. Materials and equipment required depend on your process.

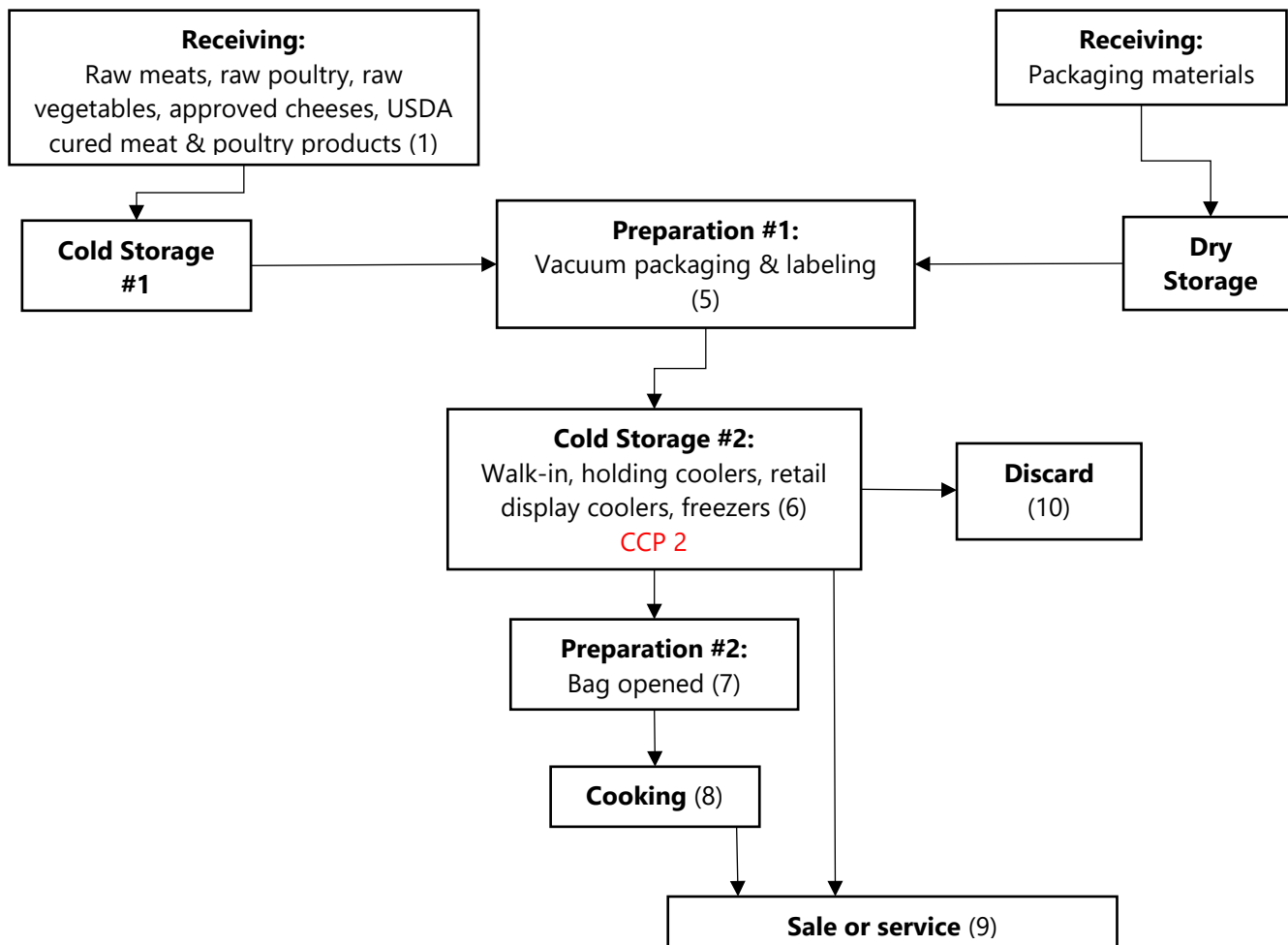
Item	Manufacturer	Model Number
ROP machine		
ROP bags		
Walk-in cooler		
Holding cooler		
Retail display cooler		
Freezer		
Monitoring thermometer/thermocouple		
Data logger (or other continuous monitoring method) for cook-chill or sous-vide process		



Food Flow Diagram

The food flow diagram below is provided as an **example**. Your diagram may be different depending on your food flow. Cook-chill or sous-vide food flow diagrams will be different from this example.

Submit a diagram for your specific process. Identify all steps in the process, all critical control points and add critical limits to all critical control points.



Identifying Hazards and Controls

Use the **examples** in the table below to identify your food safety hazards and controls. Modify the table below for your process. Steps must match your food flow diagram.

1. **List the operational steps that match your food flow.** The list is provided as an **example**. Your list must be based on your food flow.
2. **List the potential food safety hazards for each step.** Hazards can be:
 - a. Biological (e.g., *Bacillus cereus*, *Campylobacter jejuni*, *Clostridium botulinum*, *Clostridium perfringens*, *Listeria monocytogenes*, *Salmonella*, Shiga toxin-producing *E. coli*, *Shigella*, *Staphylococcus aureus*, hepatitis A, norovirus, parasites)
 - b. Chemical (e.g., poisonous chemicals, histamines, allergens)
 - c. Physical (e.g., glass, metal, stones, bones)
3. **List the preventative measures to control the hazards.** Preventative measures may include:
 - a. Standard Operating Procedures (SOPs) such as: receiving products from approved sources, monitoring temperatures, cooling using proper methods, date marking, employee training, etc.
 - b. Sanitation Standard Operating Procedures (SSOPs) such as: illness policy, handwashing, prohibiting bare hand contact with ready-to-eat food, cleaning and sanitizing equipment and utensils, etc.
4. **Identify if this step is a critical control point (CCP).** For ROP, CCPs often include: using cure as an ingredient, vacuum packaging and labeling, cold storage, etc.

Operational Step	Potential Hazard(s)	Preventative Measure(s) to Control the Hazard	Is This Step a CCP?
Receiving: Raw meats, raw poultry, raw vegetables, approved cheeses, USDA cured meat & poultry products (1)	Biological: <i>Campylobacter jejuni</i> , <i>Salmonella</i> , Shiga toxin-producing <i>E. coli</i>	Receiving products from approved sources, monitoring temperatures, employee training, illness policy, handwashing	No
Receiving: Packaging materials (2)	Chemical: Poisonous chemicals	Receiving products from approved sources, letters of guarantee ensuring that packaging material is appropriate for product use	No
Cold Storage (4)	Physical: Visible foreign material (e.g., rodent droppings, insects, etc.)	Employee training, cleaning and sanitizing equipment and utensils	No
Preparation #1: Vacuum packaging & labeling (5)	Biological: <i>Campylobacter jejuni</i> , <i>Clostridium botulinum</i> , <i>Salmonella</i> , Shiga toxin-producing <i>E. coli</i> , <i>Staphylococcus aureus</i> , hepatitis A, norovirus	Each bag/package properly labeled as required, employee training, illness policy, handwashing, prohibiting bare hand contact with ready-to-eat food, cleaning and sanitizing equipment and utensils	Yes



Hennepin County Public Health

Epidemiology and Environmental Health

479 Prairie Center Dr, Eden Prairie, MN 55344

612-543-5200 | Epi-envhth@hennepin.us

Operational Step	Potential Hazard(s)	Preventative Measure(s) to Control the Hazard	Is This Step a CCP?
Cold Storage #2: Walk-in, holding coolers, retail display coolers, freezers (6)	Biological: <i>Campylobacter jejuni</i> , <i>Clostridium botulinum</i> , <i>Listeria monocytogenes</i> , <i>Salmonella</i> , Shiga toxin-producing <i>E. coli</i> , <i>Staphylococcus aureus</i> , hepatitis A, norovirus	Monitoring temperatures, employee training, cleaning and sanitizing equipment and utensils	Yes
Preparation #2: Bag opened (7)	Biological: <i>Listeria monocytogenes</i> , <i>Staphylococcus aureus</i> , hepatitis A, norovirus	Employee training, illness policy, handwashing, prohibiting bare hand contact with ready-to-eat food, cleaning and sanitizing equipment and utensils	No
Cooking (8)	Biological: <i>Campylobacter jejuni</i> , <i>Salmonella</i> , Shiga toxin-producing <i>E. coli</i>	Monitoring temperatures, employee training, illness policy, handwashing, prohibiting bare hand contact with ready-to-eat food, cleaning and sanitizing equipment and utensils	No
Sale or Service (9)	Biological: <i>Staphylococcus aureus</i> , hepatitis A, norovirus	Employee training, illness policy, handwashing, prohibiting bare hand contact with ready-to-eat food, cleaning and sanitizing equipment and utensils	No
Discard (10)	Biological: <i>Listeria monocytogenes</i>	Employee training	No



Hennepin County Public Health

Epidemiology and Environmental Health

479 Prairie Center Dr, Eden Prairie, MN 55344

612-543-5200 | Epi-envhlth@hennepin.us

CCP Summary

Use the chart below to identify key elements of your HACCP plan. **The form below is provided as an example.** Your HACCP plan may be different depending on your process.

Critical Control Point (CCP)	Critical Limit to Control the CCP	What will be monitored?	How will it be monitored?	Frequency of monitoring	Who is responsible to monitor?	Corrective action(s) to be taken if critical limit(s) is not met	What type of records will be kept?	How will this step be verified?
Preparation #1: Vacuum packaging and labeling (5)	Each package is properly labeled, as described in Label Requirements sections of this HACCP plan	ROP package labels	Visual check	Daily	Designated employee	If label is missing or incomplete, relabel Retrain employees	HACCP Training Log ROP Production Log Corrective action(s) recorded on log(s) as needed	HACCP Training Log will be reviewed at time of training by the trainer ROP Production Log will be reviewed weekly by the PIC or manager on duty
Cold Storage #2: Walk-in, holding coolers, retail display coolers, freezers (6)	Temperature: 41°F or below	Cold storage temperatures taken between two ROP packages	Use of thermometers/ thermocouples and visual check	Daily	Designated employee	If temperature between packages exceeds 41°F, open a package and take product temperature. If product temperature exceeds 41°F, do one or more of the following: Turn unit down; Call to have unit serviced; Place ROP packages in ice water bath; Relocate product to a different unit; Discard product. Identify and discard out of date products. Retrain employees	HACCP Training Log Thermometer/ Thermocouple Accuracy Testing Log ROP Product Log	HACCP Training Log will be reviewed at time of training by trainer Thermometer/ Thermocouple Accuracy Testing Log reviewed weekly by the PIC or the manager on duty ROP Product Log will be reviewed weekly by the PIC or the manager on duty



Hennepin County Public Health

Epidemiology and Environmental Health

479 Prairie Center Dr, Eden Prairie, MN 55344

612-543-5200 | Epi-envhlth@hennepin.us

HACCP Training Program

Required Elements

Your food employee and supervisory training program must address the food safety issues of concern. Provide details below

HACCP Training Program Element	HACCP Training Program Details
Who is responsible to coordinate and provide the training? (E.g., certified food protection manager and/or PIC)	
Who will be trained? (E.g., food employees, supervisors, managers; include names and roles if possible)	
How will training be delivered? (E.g., in-person, computer-based)	
How often will training or re-training take place? (E.g., new hire, annual refresher, corrective action)	
What skills regarding ROP specialized processes will the trainee master? (E.g., sanitary use of ROP equipment, correct method for taking temperatures, proper record-keeping)	
How will the trained employee demonstrate knowledge gained? (E.g., describe the HACCP process and identify CCPs, perform process under supervision)	



HACCP Training Program

Required Topics

Your food employee and supervisory training plan must address specific HACCP training topics. Provide details below.

Topic	Objectives	HACCP Training Program Details
Concepts required for a safe operation	Food employees and supervisors will understand: <ul style="list-style-type: none"> • The parts of the HACCP plan (including the food flow diagram and CCP summary) • Any additional supporting documents provided • The importance of following the HACCP plan 	
Equipment and facilities	Food employees and supervisors will: <ul style="list-style-type: none"> • Operate the ROP related equipment correctly • Conduct all ROP activities in the designated area 	
Procedures	Food employees will: <ul style="list-style-type: none"> • Use the designated ROP work area to help control cross-contamination • Prevent bare hand contact with ready-to-eat food by using suitable utensils such as deli tissue, spatulas, tongs, single-use gloves, or dispensing equipment • Follow proper cleaning and sanitation procedures for food-contact surfaces • Follow steps identified in the food flow diagram • Monitor each CCP and take appropriate corrective actions 	



Hennepin County Public Health

Epidemiology and Environmental Health

479 Prairie Center Dr, Eden Prairie, MN 55344

612-543-5200 | Epi-envhth@hennepin.us

Sanitation Standard Operating Procedures (SSOPs)

SSOPs must address the food safety issues of concern. Provide details below.

SSOP	SSOP Details
<p>Explain how food employees will avoid contact with exposed, ready-to-eat food with their bare hands and will use suitable utensils such as deli tissue, spatulas, tongs, single-use gloves, or dispensing equipment.</p>	
<p>Identify a designated work area and describe the way either physical barriers or other methods of separation of raw foods and read-to-eat foods will be implemented, to minimize the potential of cross-contamination.</p>	
<p>Describe cleaning and sanitization procedures for food-contact surfaces.</p>	
<p>Describe how access to the processing equipment is limited to responsible trained personnel familiar with the potential food safety hazards of the operation.</p>	



Record-Keeping

Attach or include copies of all blank record-keeping forms you will use that are necessary to implement this HACCP plan. Some **examples** are included on the following pages. These may include:

- HACCP Training Log
- Thermometer / Thermocouple Accuracy Testing Log
- ROP Production Log
- ROP Product Log or ROP Product Log for Cook-chill or Sous-vide
- Other logs specific to your ROP HACCP processes, such as: Cooking and Cooling Log

These records are to be maintained by the designated employee, PIC and manager on duty to demonstrate that the HACCP plan is properly operated and managed.

*All records relating to your approval and HACCP plan must be kept on site for at least one year.



HACCP Training Log

Name: _____

The designated employee must be trained before conducting HACCP processes. Record training and any retraining on this log. Trainer must verify this log when training / retraining is completed.

Training Program Element	Date	Was Knowledge Gained? (Yes/No) <i>Retrain if No</i>	Were Skills Mastered? (Yes/No) <i>Retrain if No</i>	Trainer Initials
HACCP plan (food flow, CCPs, critical limits)				
Employee health policy and hygiene				
Preventing bare hand contact				
Preventing cross-contamination				
ROP equipment and facilities				
SSOPs (cleaning and sanitation)				

Comments and Corrective Action(s):



Thermometer / Thermocouple Accuracy Testing Log

The designated employee must test thermometer / thermocouple accuracy at least once weekly. Record Observations and any corrective actions on this log. PIC or manager on duty must verify this log weekly.

Thermometer / Thermocouple ID: _____

Date	Method Used	Thermometer Reading	Accurate (Yes/No)	Initials
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			

Verified by (PIC or manager on duty initials): _____

Thermometer / Thermocouple ID: _____

Date	Method Used	Thermometer Reading	Accurate (Yes/No)	Initials
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			
	<i>Ice Slurry</i>			

Verified by (PIC or manager on duty initials): _____

Corrective Action(s):

When to use this thermometer / thermocouple accuracy testing log

If you are following an approved HACCP plan for conducting reduced oxygen packaging (ROP) processes for TCS food, you must maintain temperature records. You may use this log for record-keeping. Make records available to the regulatory authority upon request. Keep records for at least one year.

Thermometers must be:

- Checked for accuracy at least once weekly (or manufacturer recommendation)
- Accurate to within 2°F (32°F for ice slurry testing)

Always follow manufacturer's instructions for thermometer / thermocouple accuracy checks and calibration.



When to use this ROP production log

If you are following an approved HACCP plan for conducting reduced oxygen packaging (ROP) process for TCS food, you must maintain product labeling records. You may use this log for record-keeping. Make records available to the regulatory authority upon request. Keep records for at least one year.



ROP Product Monitoring Log

The designated employee must monitor temperatures and check all ROP package labels at least once daily. Record observations and any corrective actions on this log. PIC or manager on duty must verify this log weekly.

Refrigeration Unit ID: _____ **Week of:** _____

Day and Date	Temperature	Initials	Past Use By Date? (Yes/No)	Initials	Verified by (PIC or Manager on Duty Initials)
Sunday Date:					
Monday Date:					
Tuesday Date:					
Wednesday Date:					
Thursday Date:					
Friday Date:					
Saturday Date:					
Corrective Action(s)					



When to use this ROP production monitoring log

If you are following an approved HACCP plan for conducting reduced oxygen packaging (ROP) processes for TCS food, you must maintain temperature records. You may use this log for record-keeping. Make records available to the regulatory authority upon request. Keep records for at least one year.



ROP Product Log for Cook-Chill or Sous-Vide

The designated employee must monitor temperatures at least twice daily and check all ROP package labels at least once daily. Record observations and any corrective actions on this log. PIC or manager on duty must verify this log weekly.

Refrigeration Unit ID: _____

Week of: _____

Day and Date	Time	Temp.	Initials	Time	Temp.	Initials	Past Use By Date? (Yes/No)	Data Logger Working? (Yes/No)	Initials	Verified by (PIC or manager on duty initials)
Sunday Date:										
Monday Date:										
Tuesday Date:										
Wednesday Date:										
Thursday Date:										
Friday Date:										
Saturday Date:										

Corrective Action(s)

When to use this ROP product log for cook-chill or sous-vide

If you are following an approved HACCP plan for conducting reduced oxygen packaging (ROP) processes for TCS food, you must maintain temperature records. You may use this log for record-keeping. Make records available to the regulatory authority upon request. Keep records for at least one year.

Record-keeping requirements for cold storage of ROP cook-chill or sous-vide product are:

- Twice-daily checks

AND

- Continuous, electronic monitoring (such as a data logger)

