

**VARIANCE CHANGE REQUEST**  
**Specialized Meat Processing at Retail Food Establishments**

**Section 1**  
**Establishment Information**

Company Name	<input type="text"/>				
Operator Name	<input type="text"/>				
Address	<input type="text"/>				
City	<input type="text"/>	State	<input type="text"/>	Zip Code	<input type="text"/>
Phone Number	<input type="text"/>	e-mail	<input type="text"/>		
Amendment Date	<input type="text"/>	Original Approval Date	<input type="text"/>	License Number	<input type="text"/>

**Section 2**  
**Product and Process Information**

List Proposed Changes and/or Additions to the Original Variance	<input type="text"/>
---	----------------------

If you are only adding products under existing approved processes - Proceed to the Certification check box.

Which of the above products do you vacuum package? (Reduced Oxygen Packaging, MAP or cryovac)	<input type="text"/>
--	----------------------

Are any of the above products shelf stable (intended to be held out of refrigeration)?	<input type="text"/>
---	----------------------

## Michigan Department of Agriculture and Rural Development

List any products with additives such as acidifiers or anti-microbials used to preserve, or to render the food non-potentially hazardous.

--

### Have any of your critical Limits changed?

If so, complete the appropriate sections. If you have questions, contact your processing senior inspector.

Changes in Cure

--

Changes in Cook, including Application of Humidity

--

Changes in Cooling

--

### Certification

I verify that I will keep my approved variance application package and any amendments on premises and convey to all appropriate employees. I also affirm that our firm has adequate space and the proper equipment to conduct these processes safely.

## Michigan Department of Agriculture and Rural Development

**By submitting this amended application you are committing to and agreeing that you will keep your approved plan documents on premises, ensure employees responsible for implementing the plan are familiar with the plan and appropriately trained. You also affirm that your firm has adequate space and proper equipment to conduct these processes safely.**

**Submit applications by e-mail (preferred) to:** [MDA-FoodDairyInfo@michigan.gov](mailto:MDA-FoodDairyInfo@michigan.gov). Note: The "Submit" button on the first page should automatically e-mail the application to this address.

**Mail to:** MI Dept. of Agriculture and Rural Development, Food and Dairy Division, PO Box 30017, Lansing, MI 48909

**If you have questions please contact MDARD by phone at 1 (800) 292-3939 and ask for the food processing senior inspector for your area. Call center staff will assist you if you don't know the processing senior inspector assigned to your area.**

**Visit:** <http://www.michigan.gov/meatprocessing>.

### SECTION 3 Model Cure SOP/ CCP

The use of cure (nitrite and nitrate) in food products is regulated by FDA, USDA and MDARD regulations.

1. Cure is obtained from commercial cure distributor.
2. Cure is obtained with a certificate of analysis.
3. Cure is stored in a clearly labeled container.
4. Cure addition is calculated by a competent individual.
5. Cure addition is calculated by weight and measured on an accurate scale.
6. Cure addition is logged on cure log for each batch or lot produced.
7. Cure addition is consistent with manufacturer's directions and USDA requirements.
8. Cure and spices are not combined prior to batch or lot preparation (cure and spice mixtures not combined in bulk for later use).

**Note: Maintaining a curing log is a required record.**

Practices or procedures differing from those above or are not applicable

What will be done, by who and at what frequency

Explain procedures for weighing and adding cure

Explain your scale calibration and frequency	
--	--

References:

- Supplier/Manufacturer directions
- USDA FSIS Directive 7120.1 Safe and Suitable Ingredients used in the Production of Meat, Poultry, and Egg Products, (current version)
- USDA FSIS Directive 7620.3 Processing Inspectors' Calculation Handbook
- "Sodium Nitrite in Processed Meat and Poultry Meats: A Review of Curing and Examining the Risk/ Benefit of Its Use", American Meat Science Association White Paper Series Number 3, November 2011.

Note that the USDA limit for nitrite in comminuted product is 156 ppm, the limit for pumped, tumbled or immersed product (other than bacon) is 200 ppm and the limit for bacon is 120 ppm. Minimum cure required for use in Schedule B cooling is 100 ppm.

Products cured	Name of the cure ingredient (brand and name)	Method of Curing (pickle or brine, inject, marinade, mixed in)	Amount used (oz/lb, oz/gallon)	Nitrite or nitrate ppm

Other (Specify):

**SECTION 4**

**Model Additive and Antimicrobial Ingredient SOP/CCP**

Certain additives and antimicrobials added to meat products are considered restricted ingredients. Restricted ingredients must be added according to FDA, USDA and the Michigan Food Law. Restricted ingredients include: antimicrobial agents, antioxidants, cure accelerators, phosphates and others.



**SECTION 5**  
**Model Cooking SOP-CCP**

**The COOKING STEP is also referred to as the LETHALITY STEP.**

- Jerky and similar products require humidity to be addressed in the cook/lethality step. See Humidity Requirement Appendix for recognized procedures.

- Contact your processing senior inspector if you have questions about these requirements.

**References:**

-- USDA FSIS Compliance Guideline for Meat and Poultry Jerky Produced by Small and Very Small Establishments - 2012 Updated Compliance Guideline ([http://www.fsis.usda.gov/PDF/Compliance\\_Guideline\\_Jerky\\_2012.pdf](http://www.fsis.usda.gov/PDF/Compliance_Guideline_Jerky_2012.pdf))

-- USDA FSIS Appendix A Compliance Guidelines for Meeting Lethality Performance Standards for Certain Meat and Poultry Products.

-- UDSA FSIS Time-temperature tables for cooking ready-to-eat poultry products.

-- 2009 FDA Food Code, Chapter 3

-- [http://meathaccp.wisc.edu/validation/heat\\_treatment.html](http://meathaccp.wisc.edu/validation/heat_treatment.html)

-- University of Wisconsin, Jerky Validation Plans

**Maintaining a cooking log and a thermometer verification / calibration log are required records.**

*Fill out this section for CRITICAL LIMIT GROUP 1 (See Section 2):*

Products using this critical limit	
Describe your establishment's critical limit	
Monitoring- how, when & who	
Action if critical limit is not met	
Person-In Charge (PIC) Verification- how, when & who	

*Fill out this section for CRITICAL LIMIT GROUP 2:*

Products using this critical limit	
Describe your establishment's critical limit	

Monitoring- how, when & who	
Action if critical limit is not met	
Person-In Charge (PIC) Verification-how, when & who	

*CRITICAL LIMIT GROUP 3: does not have a cooking/lethality CCP because it is not fully cooked and is not a ready to eat product.*

## **SECTION 6**

### **Model Cooling SOP-CCP**

**Select either the USDA or Food Code cooling options.**

#### **-USDA Cooling option**

1. Non-cured, partially cooked or fully cooked, intact or non-intact, meat or poultry:

a. Maximum internal temperature should not remain between 130°F and 80°F for more than 1.5 hours nor between 80°F and 40°F for more than 5 hours.

b. Chilling will begin within 90 minutes after the cooking cycle is completed. All product will be chilled from 120°F to 55°F in no more than 6 hours. Chilling will then continue until the product reaches 40°F.

2. Cured products:

a. Cured with a minimum of 100 ppm ingoing sodium nitrite.

b. Maximum internal temperature is reduced from 130°F to 80°F in 5 hours and from 80°F to 45°F in 10 hours (15 hours total cooling time). Final product holding temperature must be ≤ 41°F.

c. Cooked beef, roast beef, or cooked corned beef will have sufficient monitoring equipment, including recording devices (if applicable), to assure that the time (accuracy assured within 1 minute), temperature and relative humidity (accuracy assured within 5%) limits of these processes are being met. Data from the recording devices will be made available to regulatory program employees upon request.

#### **-Food Code Cooling option**

##### **3-501.14 Cooling.**

(A) Cooked POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) shall be cooled:

(1) Within 2 hours from 57°C (135°F) to 21°C (70F); P and

(2) Within a total of 6 hours from 57°C (135°F) to 5°C (41F) or less. P

(B) POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) shall be cooled within 4 hours to 5°C (41°F) or less if prepared from ingredients at ambient temperature, such as reconstituted FOODS and canned tuna. P

(C) Except as specified under ¶ (D) of this section, a POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) received in compliance with LAWS allowing a temperature above 5°C (41°F) during shipment from the supplier as specified in ¶ 3-202.11(B), shall be cooled within 4 hours to 5°C (41°F) or less. P

(D) Raw EGGS shall be received as specified under ¶ 3-202.11(C) and immediately placed in refrigerated EQUIPMENT that maintains an ambient air temperature of 7°C (45°F) or less. P

## Michigan Department of Agriculture and Rural Development

### 3-501.15

(A) Cooling shall be accomplished in accordance with the time and temperature criteria specified under § 3-501.14 by using one or more of the following methods based on the type of FOOD being cooled:

- (1) Placing the FOOD in shallow pans; Pf
- (2) Separating the FOOD into smaller or thinner portions; Pf
- (3) Using rapid cooling EQUIPMENT; Pf
- (4) Stirring the FOOD in a container placed in an ice water bath; Pf
- (5) Using containers that facilitate heat transfer; Pf
- (6) Adding ice as an ingredient; Pf or
- (7) Other effective methods. Pf

(B) When placed in cooling or cold holding EQUIPMENT, FOOD containers in which FOOD is being cooled shall be:

- (1) Arranged in the EQUIPMENT to provide maximum heat transfer through the container walls; and
- (2) Loosely covered, or uncovered if protected from overhead contamination as specified under Subparagraph 3-305.11(A)(2), during the cooling period to facilitate heat transfer from the surface of the FOOD.

**Note: Maintaining a cooling log is a required record.**

**Reference:**

USDA FSIS, Compliance Guidelines for Cooling Heat-Treated Meat and Poultry Products (Stabilization) (Appendix B).

*Fill out this section for CRITICAL LIMIT GROUP 1*

Products using this critical limit	
Describe your establishment's critical limit:	
Monitoring- how, when & who	
Action if critical limit is not met	
Person-In Charge (PIC) Verification- how, when & who	

*Fill out this section for CRITICAL LIMIT GROUP 2*

Products using this critical limit	
Describe your establishment's critical limit:	



# Michigan Department of Agriculture and Rural Development

Monitoring- how, when & who	
Action if critical limit is not met	
Person-In Charge (PIC) Verification- how, when & who	

*Fill out this section for CRITICAL LIMIT GROUP 3*

Products using this critical limit	
Describe your establishment's critical limit:	
Monitoring- how, when & who	
Action if critical limit is not met	
Person-In Charge (PIC) Verification- how, when & who	



**SECTION 7**  
**Model SOP for Vacuum Packaging/ROP Cured Products**

1. Throughout packaging, proper sanitary product handling will be conducted. Bare hand contact with ready-to-eat foods is prohibited.
2. Product will be placed in clean vacuum bags/pouches.
3. Place product in vacuum chamber machine in such a way that the air will be allowed to escape from the package during the process.
4. Close the vacuum chamber lid so that it seals tightly and a proper vacuum is drawn.
5. After the vacuum machine chamber cycles and opens, remove the package and cut excess plastic from the package.
6. If an unsealed package is found, carefully cut the package open as to not damage the product or allow plastic bag pieces to be left with the product. Then repackage the product.
7. If applicable, dip the product in hot water for one second to shrink the bag more tightly around the product. Wipe the product dry with a clean towel.
8. Label the product properly.
9. Store the vacuum packaged product in the cooler for further sale and distribution.
10. Identify the area where the vacuum packaging will occur.
11. Access to vacuum packaging equipment is limited to trained personnel.
12. Clean and sanitize the vacuum packaging equipment and surrounding food contact surfaces before packaging cured product.

Practices or procedures differing from those above or are not applicable	
What will be done, by who and at what frequency	