Documentation of NSSP Time / Temperature Monitoring Requirements

NSSP Rationale for Temperature Control

- * Universally, food safety officials have designated shellfish as a potentially hazardous food that is capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms.
 - * Molluscan shellfish are an animal protein food
 - * Often consumed raw or undercooked
- * Recent change to the FDA Food Code
 - Potentially hazardous foods are now considered to be <u>Time/Temperature Control for Safety</u> <u>Foods</u>
 - * <u>Time/Temperature Control for Safety Foods -</u> means a FOOD that requires time/temperature control for safety (TCS) to limit pathogenic microorganism growth or toxin formation.
- The FDA Food Code recommends that "Time/Temperature Control for Safety Foods" be held at 5 °C (41 °F) or below.



 In the case of shellfish, the National Shellfish Sanitation Program (NSSP) recognizes 7.2°C (45°F) or below is adequate to address bacteriological growth concerns associated with molluscan shellfish.

Model Ordinance Time / Temp Requirements

- * Harvester requirements
 - * CH VIII. @.o2 Shellstock Time and Temperature Controls
- * CH X General requirements for dealers
- * Dealer requirements provided at .01 Critical Control Points
 - * CH XI. Shucking and Packing
 - * CH XII. Repacking of Shucked Shellfish
 - * CH XIII. Shellstock Shipping
 - * CH XIV. Reshipping
 - * CH XV. Depuration
- * Transportation requirements
 - * CH IX .04 Shipping Temperatures
 - * CH IX .05 Transportation Records

CH X. General Requirements for Dealers

- * .01 General HACCP Requirements, C. (2) (a) requires that HACCP plans
 - * include the CCPs identified in CHs XI XV
- * .01 General HACCP Requirements, C. (6) requires dealers to
 - * Provide for a record keeping system that documents the monitoring of the critical control points.
 - * The records shall contain the actual values and observations obtained during monitoring.
- * Content requirements for HACCP records are provided at **H. Records**

Harvesters Time to Temperature Control

* Most Vibrio spp. grow in shellfish and the rate of growth is dependent upon temperature. To minimize the risk of illness, strict temperature controls must be in place.

* CH VIII @.02

Harvesters Time to Temperature Control

- * Chapter VIII Harvest Controls
 - * @.02 A
 - * A. Each shellfish producing State shall establish time to temperature requirements for the harvesting of all shellstock to ensure that harvesters shall comply with one (1) of the following:
 - * (1) The State V.v. Control Plan as outlined in Chapter II. @.06; or
 - * (2)The State V.p. Plan as outlined in Chapter II. @.07; or
 - * (3)All other shellstock shall comply with the matrix below:

Action Level	Average Monthly Maximum Air Temperature	Maximum Hours from Exposure to Receipt at a
Level 1	<50 °F (10 °C)	36 hours
Level 2	50 - 60 °F (10 - 15 °C)	24 hours
Level 3	>60 - 80 °F (15 - 27 °C)	18 hours
Level 4	>80 °F (27 °C)	12 hours

Dealer Requirements A. Receiving Critical Control Point.

- * Records required when receiving from harvester(s)
 - * Harvester tag on each container; **OR**
 - * Transaction record for each bulk shipment; AND
 - * Trip records demonstrating compliance with CH VIII @.02 A. (1), (2) or (3)

Time / Temp Monitoring Record

Vibrio Control Plan HACCP Monitoring Record Effective May 19 - October 19, 2018

FACILITY: ____

DMF DEALER PERMIT #: _____

TRANS #	HARVESTER	H	ARVES	ST	QUANTITY	PROPER TAG	ADEQU		DEALER'S	VEHICLE ≤ 45°F	OYST	ERS CO	OLED	≤ 45°F
	ID #	DATE	TIME	AREA		Y/N	TIME	Y/N	TIME	TEMP	DATE	TIME	TEMP	INITIALS
1234	123456	6/22/2018	10:25 AM	SC-61	10 x 100	Y	11:45 AM	Y	12:15 PM	39°F	6/22/2018	1:15 PM	41°F	EH
								_						
						and the second second								
				Name I and										
										Section and				

Weekly Review by___

Weekly Review Date

Dealer Requirements A. Receiving Critical Control Point.

- * Records required when receiving from dealer(s)
 - * Dealer tag on each container; AND
 - Documentation provided by dealer as required by CH IX, .05;
 AND
 - * Shellstock is adequately iced; OR
 - * Shipped shellstock in conveyance maintained at ≤ 45 °F; **OR**
 - * Cooled shellstock to an internal temperature of \leq 50 °F

Dealer Requirements A. Receiving Critical Control Point.

- * If dealer receives shellstock not cooled to 50 °F or in accordance with State Vv. Or Vp. Plans
 - If ship time longer than four (4) hours must also include a time/temperature device;
- * Shipments of four (4) hours or less
 - * Time/temperature device *not required*

Receiving Records



TAG FACE



Sample of HACCP Receiving Record

PURCHASE ORDER

TIGARD, OR 97281-3785

Vendor			Ship To		
		Terms	Ship Via	FOB	Date Expected
		Net 30	DELTA	LAX	2/5/15
ltem	Description	Note:	Qty	Rate Class	Amount
993 A25	24 CT LITTLENECK CLAIAS 25LB. FARMED PRODUCT OF USA	and the same same	50	2.40 4L	120.00
993 B10	17 CT LITTLENECK CLAIAS 10LB. FARMED PRODUCT OF USA	in phase in the	10	2.74 4L	27.40
993 B25	17 CT LITTLENECK CLAMS 25LB. FARMED PRODUCT OF USA	0.00000000000	125	2.69 4L	336.25
993 C25	12 CT LITTLENECK CLAMS 25LB. FARMED PRODUCT OF USA	113 Bargaras	425	2.51 4L	1,066.75
993 D25	9 CT LITTLENECK CLAMS 25LB. FARMED PRODUCT OF USA	0	475 -	2.18 4L	981.00
993 E25	6 CNT LITTLENECK CLAMS 25 Ib FARMED PRODUCT OF USA	fler	300	2.18 4L	654.00
993 E5	6 CT LITTLEN3CK CLAMS 5 LB. FARMED - PRODUCT OF USA		50	2.28	114.00
	Product was pre-childed to the following temperature prior to being supped, and placed on a conveyance this was pre-childed to 43° F prior to loading. Time 4:00 Temp: 44 ^o 11ate: 2 -3 ^o 2 -3-15 5 059-72.71	was	100,220,00		The second second
Phone: {	Fax	MSC - COC#:		otal	\$3,299.40

Product was pre-chilled to the following temperature prior to being shipped, and was placed on a conveyance that was pre-chilled to 45° F prior to loading.

Time: 4:00 Temp: 44" Date: 2-3-15

Sample of HACCP Receiving Record



Sample of HACCP Receiving Record



Drivers' Signature

EMERGENCY DECOOLOR -

Dealer Requirements B. Storage Critical Control Point.

- B. Shellstock Storage Critical Control Point Critical Limits. The dealer shall ensure that:
 - (1) If wet storage in artificial bodies of water is practiced, water quality meets the requirements outlined in Chapter VII. .04; and [C]
 - (2) Once placed under temperature control and until sale to the processor or final consumer, shellstock shall:
 - (a) Be iced; or [C]
 - (b) Be placed in a storage area or conveyance maintained at 45 °F (7.2 °C) or less; and [C]
 - (c) Not be permitted to remain without ice, mechanical refrigeration or other approved methods of storage, as required in Section .01 B. (1) or Section .01 B. (2) (a) or (b) for more than two (2) hours at points of processing or transfer such as loading docks. [C]
 - (3) All oysters harvested under State Vibrio Control Plans other than those labeled for a restricted use shall meet the following temperature requirements:
 - (a) Cooled to an internal temperature of 55 °F (12.7 °C) within the time periods outlined in the State V.v. Control Plans. [C]
 - (b) Cooled to an internal temperature of 50 °F (10 °C) within the time periods outlined in the State V.p. Control Plans. Shellstock cooled to an internal temperature of 55 °F (12.7 °C) to comply with a V.v. Control Plan is considered in compliance with this requirement. [C]

(4) All other shellstock obtained from a licensed harvester shall be placed in a conveyance pre-chilled or a storage area maintained to 45 $^{\circ}$ F (7.2 $^{\circ}$ C) or less and cooled to an internal temperature of 50 $^{\circ}$ F (10 $^{\circ}$ C) prior to shipment. [C]

Sample of HACCP Refrigeration Log

Cooler Temperature Log Month of _____

		1		2		3		4			5		6		7	
Temperature																
Time taken																
Initials																
Date and Signature of	of rev	iewe	r						2 7	1	/					

		8		9		10		11		12	 	13		14	
Temperature															
Time taken															
Initials															
Date and Signature of	of revie	f reviewer							 /	1					

		15		16		17		18	 	19		20		21	
Temperature															
Time taken															
Initials															
Date and Signature of	of revie	reviewer							 1	/					

		22		23	 	24		25		26		27		28	
Temperature							2								
Time taken															
Initials															
Date and Signature of	of rev	iewe	r		 a 14				 /	/					

	29	30	31		
Temperature					
Time taken					
Initials					
Date and Signature	of reviewer			1	1

Firm Name:

Firm 4	Address:	

Sample of Shellstock Temperature Storage Record

11			
Atton, TX 78358			
SHELLSTOCK S	HIPPING DOCUMEN	ŕ.	
Date of Harvest Lot# Harvest Area 199/13 COPANO 12091	3 340 C	CTED RESTRICTED (Green Tage)	
Date of Time of Shipment Shipment Temperature of Shipment 12/9/13 7:15 36	Product was cooled to an internal meat temp, o 607 Fwithin 10 hrs prior to shipment VesN0	A recording device is required	Product was cooled to an internal meat
SIGNATURE OF SHIPPING PERSONNEL	EACHING 50'F DEGREES, A TIME/TEMPERATURE RECORDIN E ISLESS THAN 4 HOURS, A TIME/TEMPERATURE DEVICE I	IG DEVICE MUST ACCOMPANY THE S NOT REQUIRED.	 temperature of 50°F within 10 hrs prior to
RECI	IVING FIRM		shipment
	eceived From		
Name & Location:	TX 78358		Assembled by a
meat temperature of 50 F or less; or accompanied by a time/temperature reco	ing device which indicated continuous cooling has occurred.	# Sacks	Accompanied by a time/temperature
12-10-75 Product (ced, in a convegance at or below 45 F of 50-F or keas SIGNATURE OF RECEIVING PERSONNEL	APERATURES Cooling has occurred	Rejected	recording device with indicated continuous
All shipments of shellstock shall be accompanied with documentation indicati	the time of shipment and that all shipping conveyances comply	with the requirements of Chapter IX.04.	cooling has occurred

D. Processing Critical Control Point.

 To maintain optimum bacteriological quality, it is preferable that the elapsed time between shucking and cooling to a temperature of 7.2 °C (45 °F) does not exceed four (4) hours. More rapid processing is very desirable.

D. Shucked Meat Storage Critical Control Point.

- Shucked shellfish are an excellent medium for the growth of bacteria. Thus, it is very important that the packaged shellfish be cooled and refrigerated promptly so that bacteria growth is minimized.
- * Studies have shown that bacterial growth is significantly reduced at storage temperatures of less than 7.2 °C (45 °F) and that storage in wet ice is the most effective method for refrigeration of shucked meats.

Shellfish Shucking Log

PACKING ROOM LOG

SHUCKE	D DATI	E:								ted into Final I from PLA			
# of Shuckers = # of Sacks in each Lot	Lot #	Harvest Date	Area Worked	Time sack taken from cooler OUT	Time shucked product returned to cooler IN	Meat Temp (Internal)	# Totes per Lot	Initials	DATE Packed into final container	Time tote taken from cooler OUT	Time packed product returned to cooler IN	Meat Temp (Internal)	Initials
	1					°F						°F	
···						°F						· °F	1
	2					°F						°F	
						°F						°F	
	3					°F						°F	
						°F						°F	
	4					°F						°F	
						°F						°F	
	5					°F	71.					°F	
	1					°F						°F	1
	6					°F						°F	
						°F						°F	-
	7					°F						°F	
						°F					T	°F	1
	8					°F	1	1				°F	
						°F	1					°F	
	9					°F			1	-		°F	
						°F						°F	+

* NOTE: Internal meat temperatures from the last container packed in each lot

.

Weekly Record Review for the week of:		Comments / Corrective Actions Taken:
thru		
Ву:		
Signature	Date	

Plant Forms/Harbor 9.02

D. Processing Critical Control Point.

- * The dealer shall ensure that:
- * (1) For shellstock which has not been refrigerated prior to processing:
 - * (a) Shucked meats are chilled to an internal temperature of 45 °F (7.2 °C) or less within three (3) hours of shucking.
 - * (b) In-shell product is chilled to an internal temperature of 45 °F (7.2 °C) or less within three (3) hours of processing.
- * (2) For shellstock refrigerated prior to processing:
 - * (a) Shucked meats are chilled to an internal temperature of 45 °F (7.2 °C) or less within four (4) hours of removal from refrigeration.
 - * (b)In-shell product is chilled to an internal temperature of 45 °F (7.2 °C) or less within four (4) hours of removal from refrigeration.

D. Processing Critical Control Point.

- * (3) If heat shock is used, once heat shocked shellstock is shucked, the shucked shellfish meats shall be cooled to 45 °F (7.2 °C) or less within two (2) hours after the heat shock process.
- * (4) When heat shock shellstock are cooled and held under refrigeration for later shucking, the heat shocked shellstock shall be cooled to an internal temperature of 45 °F (7.2°C) within two (2) hours from time of heat shock.
- * (5) For in-shell product the internal temperature of meats does not exceed 45 °F (7.2 °C) for more than two (2) hours during processing.

Transportation Requirements

* CH IX. Transportation

* .04 Shipping Temperatures

* Shellfish dealers shall ship shellfish adequately iced; or in a conveyance pre-chilled at or below 45 °F (7.2 °C) ambient air temperature.

* .05 Transportation Records

* All shipments of shellstock shall be accompanied with documentation indicating the time of shipment and that all shipping conveyances comply with the requirements of Chapter IX.
 .04. This documentation must include a notice of all shellstock harvested under the requirements of Chapter VIII. @.02 A. (3) that has not been cooled to an internal temperature of 50 °F (10 °C) and indicate the presence of a time/temperature recording device.

Transportation Records

- * Who is responsible for completing records that accompany dealer to dealer shipments?
 - * **Shipping dealer** if using own conveyances or contracting a common carrier to transport to another dealer
 - * <u>**Receiving dealer</u>** if using own conveyances or contracting a common carrier to pick up shipment</u>
- * Transport directly to retail
 - * Compliance with FDA Food Code and relevant State laws
 - * Compliance with CH IX.05 not necessary

Transportation Records

- * Shipping dealer required to prepare the record for the pre-chilling requirement
 - * **NOT** intended to be a HACCP record for the shipping dealer
- * Dealer picking up shipment from another dealer must demonstrate conveyance pre-chilled to 45 °F.
 - * **IS** a receiving HACCP record for the dealer picking up the shipment
- * See Section IV Guidance Documents pages 376 378

INTERSTATE SHELLFISH SANITATION CONFERENCE

Thank You!

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