

Crab, Dungeness

Generic HACCP Plan

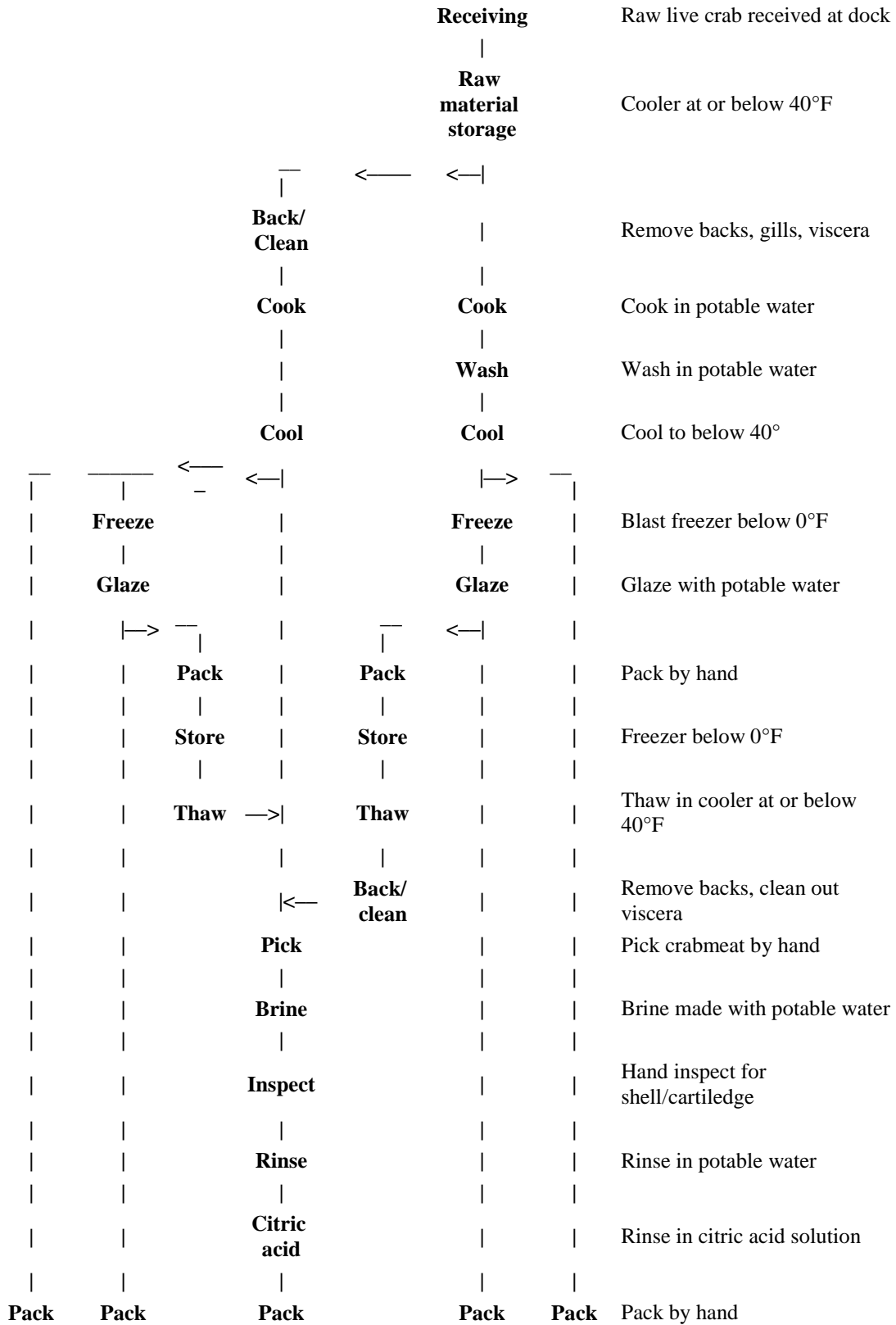
Updated 7/17/97

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1. Product Description
 2. Flow Diagram
 3. Potential Hazards
 4. Hazard Analysis Worksheet
 5. HACCP Plan Form
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1. Product Description

Firm name:	ABC Seafood Company
Firm address:	Anywhere, USA
Raw material:	Dungeness crab (<i>Cancer magister</i>)
Raw material harvest area:	California, Oregon, Washington, British Columbia, Alaska
Raw material received:	Directly from harvester
Finished Product:	Cooked Dungeness crab, whole, sections, and picked meat, fresh and frozen
Food additives, ingredients, processing aids:	Salt, citric acid
Packaging:	Fresh and frozen whole and sections, air-packaged; fresh and frozen picked meat vacuum packaged
Storage and distribution:	Stored and distributed frozen or on ice or under refrigeration
Intended use:	Ready-to-eat without further cooking
Intended consumers:	General public

2. Flow Diagram



			may occur in crab viscera			
	CHEMICAL Environmental chemical contaminants and pesticides	No	Not reasonably likely to occur			
	PHYSICAL None					
Raw material storage	BIOLOGICAL Pathogen growth	No	Does not apply to live raw material			
	CHEMICAL None					
	PHYSICAL None					
Back/clean	BIOLOGICAL Pathogen growth	No	Period of time at this step is short			
	CHEMICAL None					
	PHYSICAL Metal inclusion	No	Not reasonably likely to occur			
Cook	BIOLOGICAL Pathogen survival	Yes	Pathogens could survive undercooking	Proper cook	Yes	
	CHEMICAL None					
	PHYSICAL None					
Wash	BIOLOGICAL Pathogen contamination	No	SSOP			
	BIOLOGICAL Pathogen growth	No	Period of time at this step is short			
	CHEMICAL None					
	PHYSICAL None					
Cool	BIOLOGICAL Pathogen contamination	No	SSOP			
	BIOLOGICAL Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Cool rapidly	Yes	
	CHEMICAL None					

Freeze	PHYSICAL None				
	BIOLOGICAL Pathogen contamination	No	SSOP		
	CHEMICAL None				
Glaze	PHYSICAL None				
	BIOLOGICAL Pathogen contamination	No	SSOP		
	CHEMICAL Food and color additives	No	No food or color additives are used		
Pack	PHYSICAL None				
	BIOLOGICAL Pathogen contamination	No	SSOP		
	CHEMICAL None				
Frozen storage	PHYSICAL None				
	BIOLOGICAL None				
	CHEMICAL None				
Thaw	PHYSICAL None				
	BIOLOGICAL Pathogen contamination	No	SSOP		
	BIOLOGICAL Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Control cooler temperature	No
Back/clean	CHEMICAL None				
	PHYSICAL None				
	BIOLOGICAL Pathogen contamination	No	SSOP		
	BIOLOGICAL Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Evaluate exposure to temperatures above 40°F	Yes
	CHEMICAL None				

	PHYSICAL Metal inclusion	No	Mechanical processing equipment is not reasonably likely to cause metal inclusion		
Pick crabmeat	BIOLOGICAL Pathogen contamination	No	SSOP		
	BIOLOGICAL Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Evaluate exposure to temperatures above 40°F	Yes
	CHEMICAL None				
	PHYSICAL None				
Brine	BIOLOGICAL None				
	BIOLOGICAL Pathogen growth	No	Period of time at this step is short		
	CHEMICAL Food and color additives	No	Salt is not a potential health hazard		
	PHYSICAL None				
Inspect	BIOLOGICAL Pathogen contamination	No	SSOP		
	BIOLOGICAL Pathogen growth	No	Period of time at this step is short		
	CHEMICAL None				
	PHYSICAL None				
Rinse	BIOLOGICAL Pathogen contamination	No	SSOP		
	BIOLOGICAL Pathogen growth	No	Period of time at this step is short		
	CHEMICAL None				
	PHYSICAL None				

Citric acid dip	BIOLOGICAL Pathogen growth	No	Period of time at this step is short		
	CHEMICAL Food and color additives	No	Citric acid is not a potential health hazard		
	PHYSICAL None				
Pack	BIOLOGICAL Pathogen contamination	No	SSOP		
	BIOLOGICAL Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Evaluate exposure to temperatures above 40°F	Yes
	CHEMICAL None PHYSICAL None				
Vacuum seal containers	BIOLOGICAL None				
	CHEMICAL None				
	PHYSICAL None				
Cool	BIOLOGICAL Pathogen contamination	No	SSOP		
	BIOLOGICAL Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Cool rapidly	Yes
	CHEMICAL None PHYSICAL None				
Freeze	BIOLOGICAL Pathogen contamination	No	SSOP		
	CHEMICAL None				
	PHYSICAL None				
Finished Product Storage (Fresh)	BIOLOGICAL Pathogen growth (<i>C. botulinum</i> toxin formation for vacuum-packaged products)	Yes	Temperature abuse may allow pathogen growth	Store at proper temperature	Yes

CHEMICAL
 None
 PHYSICAL
 None
 Finished
 Product BIOLOGICAL
 None
 Storage
 (Frozen) CHEMICAL
 None
 PHYSICAL
 None

Firm Name: ABC Seafood Company

Product Description: Cooked Dungeness crab, whole, sections, and picked meat, fresh and frozen

Firm Address: Anywhere, USA

Storage and Distribution: Stored and distributed frozen or on ice or under refrigeration

Signature:

Intended Use and Consumer: Ready-to-eat by general public

Date:

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5. HACCP Plan Form

(1) Critical Control Point (CCP)	(2) Significant Hazards	(3) Critical Limits for each Preventive Measure	(4) What	Monitoring			(8) Corrective Actions	(9) Records	(10) Verification
				(5) How	(6) Frequency	(7) Who			
Receiving	Natural toxins - ASP	No crab may be harvested from an area that is covered by a State ASP advisory, or for which there is information from fishermen, news media, academia, or other sources that there is a current ASP problem	ASP advisories	Visual	When received	Receiving supervisor	Reject crab from closed areas	Receiving records	Weekly review of monitoring and corrective action records
Cook	Pathogen survival	Minimum time: 15 minutes Minimum temperature: 210°F	Time Process temperature	Visual Digital time/ temperature data logger	At start and end of cook Continuous Visual check once a day	Cooker operator Cooker operator	Extend process or evaluate temperature to compensate for deviation from CL and segregate AND	Cook record Data logger printout	Documentation of process establishment Weekly review of monitoring, verification, and corrective action records

							hold for evaluation		Check accuracy of data logger against the mercury-in-glass thermometer daily
									Calibrate the mercury-in-glass thermometer yearly
Cool	Pathogen growth and toxin formation	Cool from 140°F to 70°F in 2 hours and 70°F to 40°F in 4 more hours	Cooked crab internal temperature	Dial thermometer in marked batches of cooked crab	Start marked batch approx. every two hours during cooking	Production supervisor	Move part of crab to alternate cooler and/or add ice Hold and evaluate based on total time/temperature exposure	Production record	Check accuracy of dial thermometer once per month; Weekly review of monitoring, corrective action, and verification records
Back/Clean, Picking, Packing	Pathogen growth and toxin formation	No more than 2 hours cumulative exposure to temperatures above 40°F during backing/cleaning, picking, packing	Time of product exposure to unrefrigerated temperatures	Visual observation of marked containers	Start marked container approx. every 2 hours during Back/clean, picking, and packing	Production supervisor	Immediately ice product or move to coolr Hold and evaluate based on total time/temperature exposure	Production record	Weekly review of monitoring and corrective action records
Storage (Fresh) Air-Packaged Products	Pathogen growth and toxin formation	Cooler at or below 40°F	Cooler temperature	Recording thermometer	Continuous with visual check once a day	Production supervisor	Move to alternate cooler and/or add ice Hold and evaluate based on total time/temperature exposure	Recorder chart	Check accuracy of recorder once per day Weekly review of monitoring, corrective action, and verification records
Storage (Fresh) Vacuum-Packaged Products	<i>C. botulinum</i> toxin formation	Cooler at or below 38°F	Cooler temperature	Recording thermometer	Continuous with visual check once a day	Production supervisor	Move to alternate cooler and/or add ice Hold and evaluate based on total time/temperature exposure	Recorder chart	Check accuracy of recorder once per day Weekly review of monitoring, corrective action, and verification records

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