Alaska Shellfish Dealer Training

INTERSTATE SHELLFISH ISSC SANITATION CONFERENCE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE OF ALASKA

State of Alaska Epidemiology

Bulletin

Department of Health and Social Services
Joel Gilbertson, Commissioner

Division of Public Health
Richard Mandsager, MD, Director

Section of Epidemiology
Joe McLaughlin, MD, MPH, Editor

3601 C Street, Suite 540, PO Box 240249, Anchorage, Alaska 99524-0249 (907) 269-8000
24-Hour Emergency Number 1-800-478-0084
http://www.epi.Alaska.gov

Bulletin No. 18 August 20, 2004

Outbreak of *Vibrio parahaemolyticus* Gastroenteritis Associated with Consumption of Alaskan Oysters—Summer, 2004

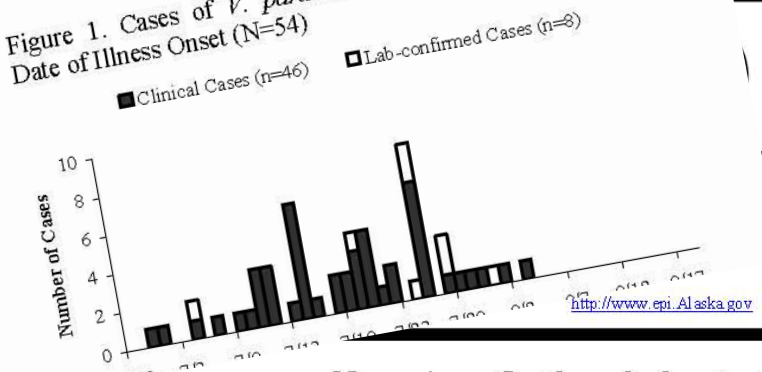
Background

Vibrio parahaemolyticus is a bacterium that naturally inhabits coastal waters in North America. It causes gastrointestinal illness in humans characterized by watery diarrhea often with abdominal cramping, nausea, vomiting, fever, and chills. These symptoms typically occur within 24 hours of ingestion. Illness is usually self-limited and lasts 3 days. Severe disease is rare and occurs more commonly in persons with weakened immune systems. Most people become infected by eating raw or undercooked shellfish, particularly oysters.

Introduction

On July 16, the Section of Epidemiology (SOE) was notified

Figure 1. Cases of *V. parahaemolyticus* Gastroenteritis by Date of Illness Onset (N=54)



Bulletin

http://www.epi.Alaska.gov

Division of Public Health
Beverly K. Wooley, Director

Editor:
Joe McLaughlin, MD, MPH

Local (907) 269-8000
24 Hour Emergency (800) 478-0084

Bulletin No. 9 February 19, 2009

Norovirus Outbreak due to Consumption of Raw Oysters — Alaska, 2009

Introduction

On February 5, the Section of Epidemiology (SOE) was notified by the Department of Environmental Conservation (DEC) of a possible foodborne outbreak in Sitka involving at least 10 people who all attended a Superbowl party (Party A) together on February 1. In collaboration with DEC and Section of Public Health Nursing, we began an immediate investigation.

Methods and Results

Retrospective Cohort Study

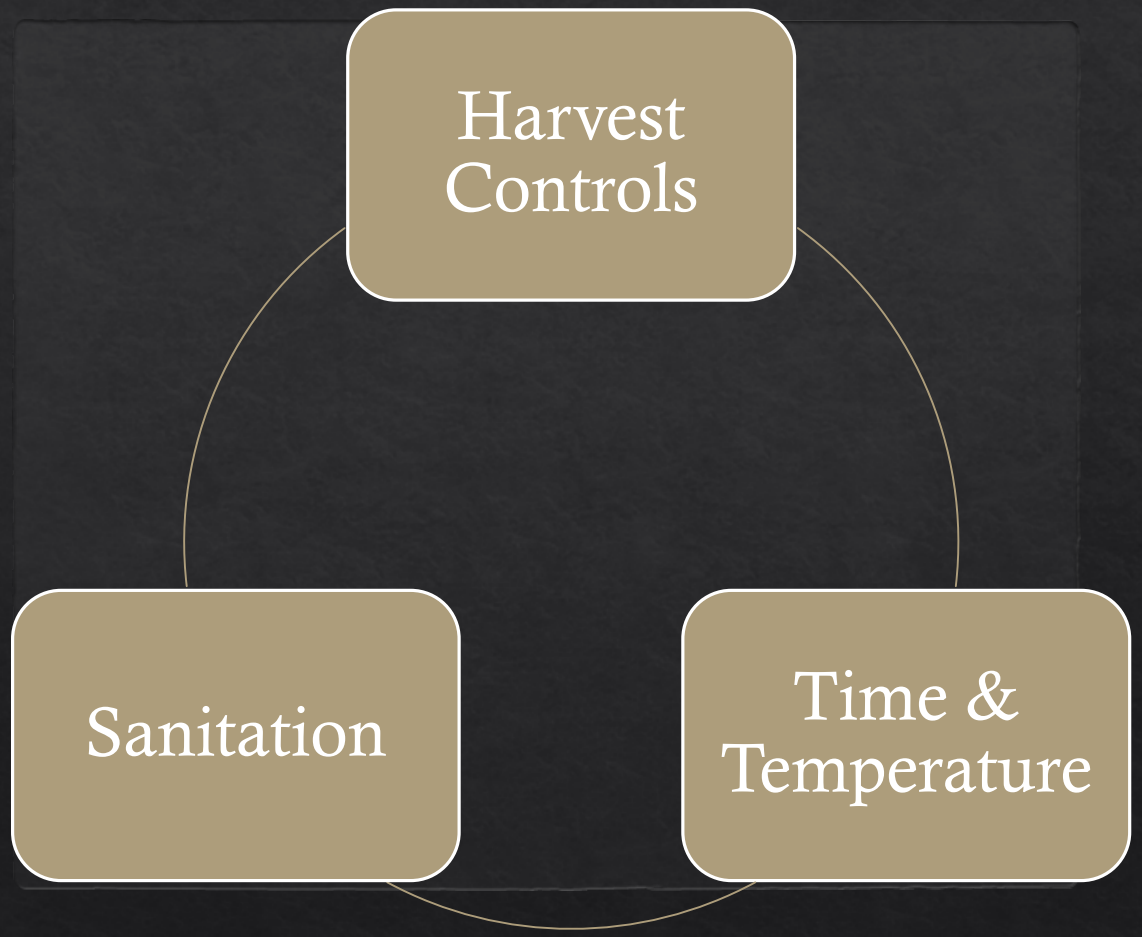
same lot that were consumed at Party A and water specimens were collected for testing. Environmental samples were sent to the Food and Drug Administration (FDA) Gulf Coast Seafood Laboratory for norovirus testing.

Sanitarians traced oysters consumed by ill persons back to Farm A in Sitka. Two oyster nets (Nets A and B) harvested the week of January 29 were submerged in Sitka Channel (adjacent to several boat harbors) for approximately 24 hours (January 29–30) prior to sale. Dock-side oyster sales commenced January 30. Four additional oyster nets (Nets C–

Concerns

- Bacteria and Viruses
- Physical Hazards
- Chemicals

Controls



Dealers

Shucking

Packing/Repacking

Shipping/Reshipping

Dealer Inspections

- 4x per Year
  - Shucker-Packer
  - Repacker
- 2x per Year
  - Shellstock Shipper
  - Reshipper

Inspections

1. Hazard Analysis Critical Control Point (HACCP)
2. Sanitation Items
3. Additional Requirements

National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish: 2013 Revision

NSSP Standardized Shellfish Processing Plant Inspection Form

Agency Name:					Date	
Type of Inspection:	☐ Certification ☐ Pre-operational ☐ Routine ☐ Follow-up ☐ Standardization					
Dealer Name:				Certification Number		
Dealer Address:						
	Hazard Analysis Critical Control Point (HACCP)					
1.	**HACCP Plan** Yes ☐ No ☐ Required for Certification					
2.	Plan Elements Identified and Adequate	✓/✗ NA	**Code**		✓/✗ NA	**Code**
	(a) Hazards		O	(e) Critical Control Points		K
	(b) Records		O	(f) Monitoring		K
	(c) Critical Limits		K	(g) Verification Procedures		O
	(d) Name, Address, Signed and Dated		O	(h) Corrective Action if identified		K
3.	**HACCP Training**	Yes ☐ No ☐		Code O		
4.	**Plan Implementation**	**Corrective Actions Recorded (K)** **Verification Procedures (K) (Signature)** **Monitoring Procedures (K)** **Records: Accurate/ Maintained (K) Format (O)** **Initialed/Dated (O) Firm's Name on record (O)**			✓/✗ NA	**Code**
	(a) Receiving					
	(b) Shellstock Storage					
	(c) Processing					
	(d) Shucked Meat Storage					
	(e) Other Critical Limits					
5.	Approved Source Control Failure					C
6.	Time/Temperature Control Failure					C
7.	Other Critical Control Failure					C
	Sanitation Items			**Citation**	✓/✗	**Code**
8.	Safety of water for processing and ice production			.02A		
9.	Condition and cleanliness of food contact surfaces			.02B		
10.	Prevention of cross-contamination			.02C		
11.	Maintenance of hand-washing, hand sanitizing, and toilet facilities			.02D		
12.	Protection from adulterants			.02E		
13.	Proper labeling, storage, and use of toxic compounds			.02F		
14.	Control of employees with adverse health conditions			.02G		
15.	Exclusion of pests			.02H		
16.	Sanitation Monitoring and Records					S(K/O)
	Additional Model Ordinance Requirements			**Citation**	✓/✗	**Code**
17.	Plants and Grounds			.03A		
18.	Plumbing and related facilities			.03B		
19.	Utilities			.03C		
20.	Disposal of other waste			.03D		
21.	Equipment condition and cleaning, maintenance, and construction of non-food contact surfaces			.03E		
22.	Shellfish storage and handling			.03F		
23.	Heat shock			.03G		
24.	Supervision			.03H		
25.	Transportation (To include only the person shipping)			IX.05		K
26.	Labeling and Tagging			X.05,.06,.07		S (K/O)
27.	Shipping Documents and Records / Written Recall Procedures			X.08, .03		K
Dealer's Signature			**Inspector's Signature**			

Section IV Guidance Documents – Chapter III Harvesting, Handling, Processing, and Distribution
.02 Shellfish Plant Inspection Standardization Procedures
Page | .02-5

HACCP

	Hazard Analysis Critical Control Point (HACCP)					
1.	**HACCP Plan** Yes ☐ No ☐ Required for Certification					
2.	Plan Elements Identified and Adequate	✓/✕ NA	**Code**		✓/✕ NA	**Code**
	(a) Hazards		O	(e) Critical Control Points		K
	(b) Records		O	(f) Monitoring		K
	(c) Critical Limits		K	(g) Verification Procedures		O
	(d) Name, Address, Signed and Dated		O	(h) Corrective Action if identified		K
3.	**HACCP Training**	Yes ☐ No ☐		Code O		
4.	**Plan Implementation**	**Corrective Actions Recorded (K)** **Verification Procedures (K) (Signature)** **Monitoring Procedures (K)** **Records: Accurate/ Maintained (K) Format (O)** **Initialed/Dated (O) Firm's Name on record (O)**			✓/✕ NA	**Code**
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	(d) Shucked Meat Storage					
	(e) Other Critical Limits					
5.	Approved Source Control Failure					C
6.	Time/Temperature Control Failure					C
7.	Other Critical Control Failure					C

Sanitation and Other

	Sanitation Items	Citation	✓/✗	Code
8.	Safety of water for processing and ice production	.02A		
9.	Condition and cleanliness of food contact surfaces	.02B		
10.	Prevention of cross-contamination	.02C		
11.	Maintenance of hand-washing, hand sanitizing, and toilet facilities	.02D		
12.	Protection from adulterants	.02E		
13.	Proper labeling, storage, and use of toxic compounds	.02F		
14.	Control of employees with adverse health conditions	.02G		
15.	Exclusion of pests	.02H		
16.	Sanitation Monitoring and Records			S(K/O)
	Additional Model Ordinance Requirements	**Citation**	**✓/✗**	**Code**
17.	Plants and Grounds	.03A		
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26.	Labeling and Tagging	X.05,.06,.07		S (K/O)
27.	Shipping Documents and Records / Written Recall Procedures	X.08, .03		K

Top Concerns

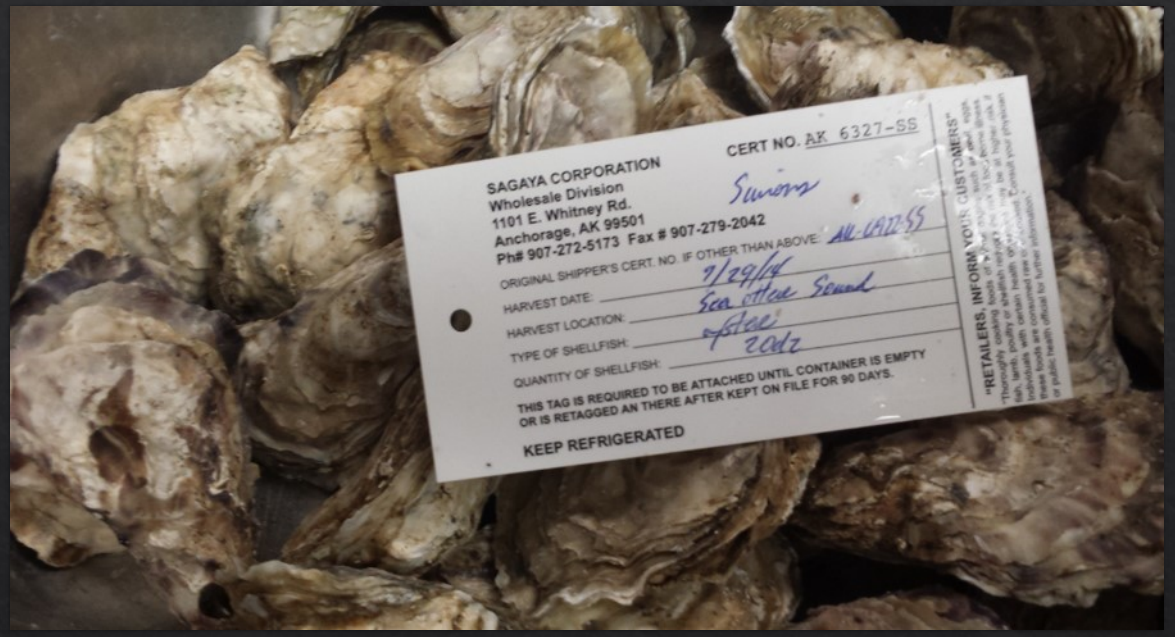
Shellstock Identification

Temperature Controls

Sanitation Controls

Identification

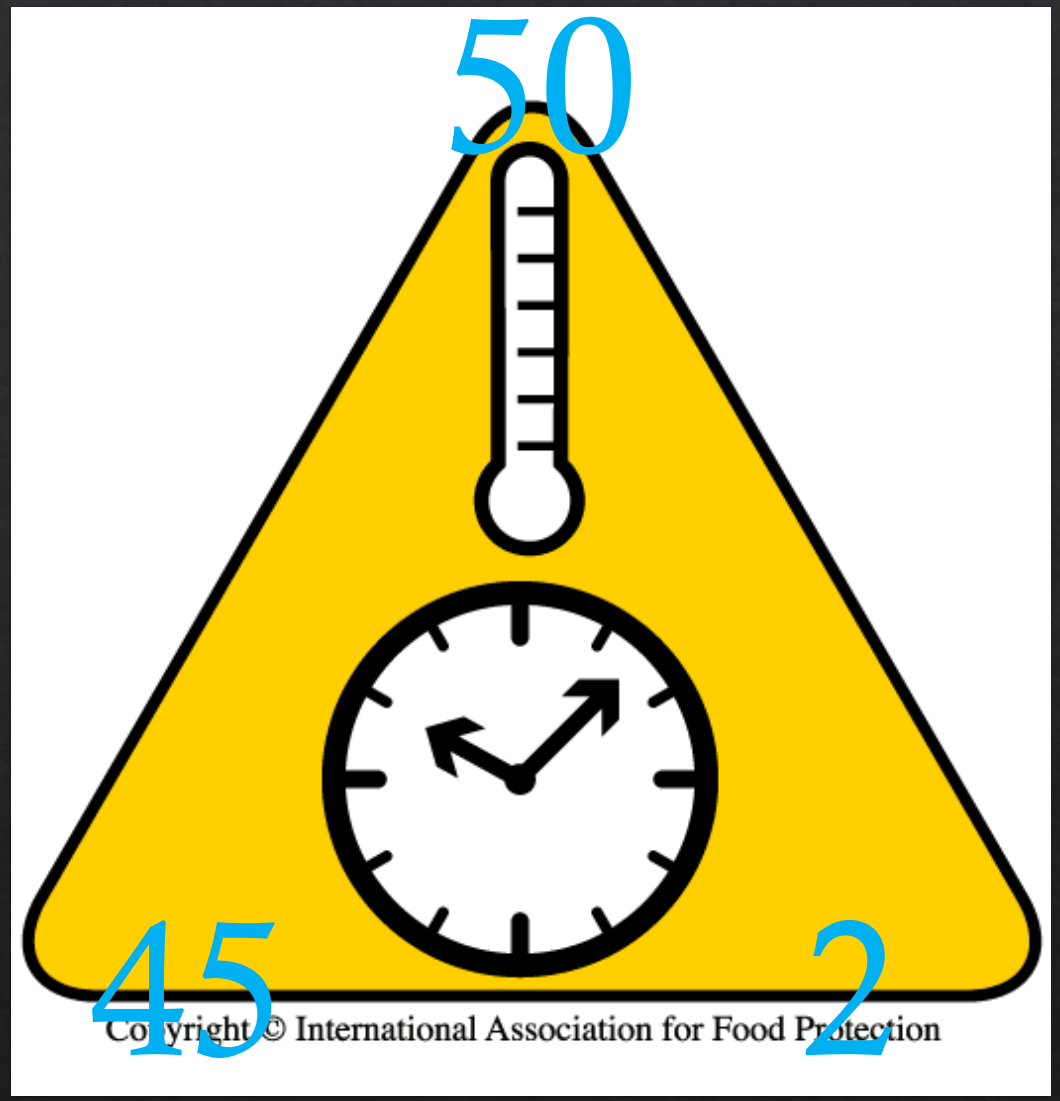
- Who
- When
- Where
- What



Time Temperature Controls

- Hazard = *Vibrio parahaemolyticus*

Keep it Cool!



Harvest Control During Vp Months
June 15th – September 15th

* Water Temperature * Air Temperature * Harvesting Technique

Water or Air Temperature at Time Shellfish is Harvested	Max Hours from Exposure Time to Temperature Control at Harvesting	Max Hours from Exposure Time to Receiving at Dealer Facility
< 50° F (10° C)	5	10
>50° F (10° C)	<5	10

Harvest Control Non-Vp Months

* Water Temperature * Air Temperature * Harvesting Technique

Average Monthly Maximum Air Temperature	Max Hours from Exposure Time to Receiving at Dealer Facility
< 50° F (10° C)	36
>50° F to 60° F (10° C - 15° C)	24
> 60° F to 80° F (15° C - 27° C)	18
> 80° F (≥ 27° C)	12

Vibrio parahaemolyticus
Control Plan

June 15th – Sept 15th

Actions:

- Take weekly water temperature at top (3' – 6') of suspended gear and record temperature.

If a weekly temperature is ≥60° F,

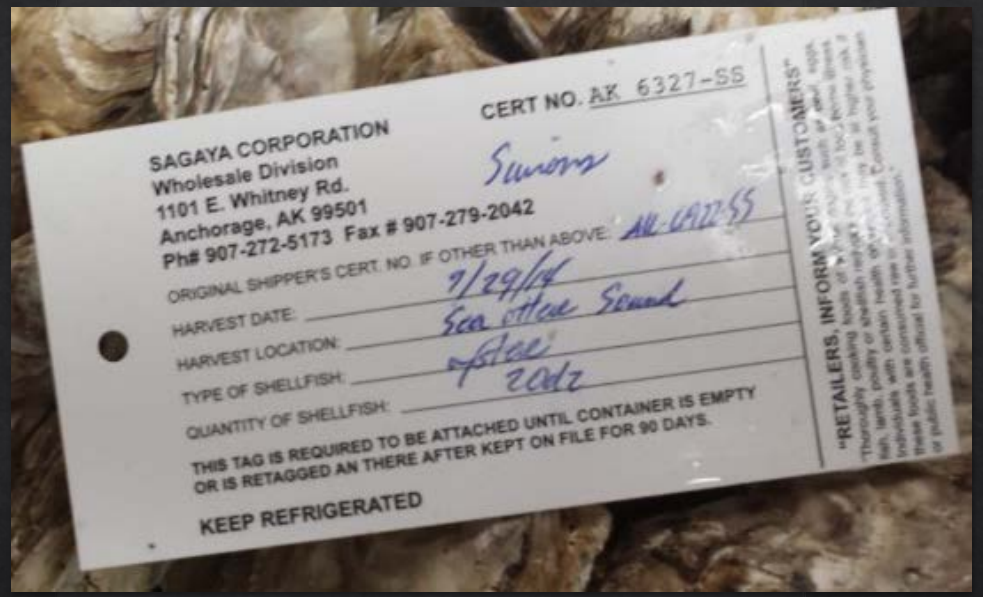
- Stop Harvest
- Monitor daily water temperatures until 10 consecutive readings ≤ 59 °F and
- Implement control measures.

Control Measures:

- Lower oyster gear below the thermocline and continue to measure temperature
- Temp control w/in 5 hours and cooled to 50° F within 10 hours after refrigerated

Transport from Harvester to Original Dealer

- Clock starts at the time of 1st shellstock taken from water or beach
- Ice/refrigeration not required during transport UNLESS dealer will need it to meet time to temp controls.
- Temperature control means time in the cooler, not just delivery



All oysters harvested under Vp Plan must be cooled to 50°F w/in 10 hrs (internal temp)!

Receiving

Generally,

- Iced; OR
- Shipped in conveyance maintained at or below 45° F; OR
- Cooled to internal temp of 50° F or less; UNLESS
- < 4 hours shipping time or accompanied by time/temp recorder & documentation

All oysters harvested under Vp Plan must be cooled to 50°F w/in 10 hrs (internal temp)!

Storage

Generally,

- Iced; OR
- In storage area or conveyance at 45° F or less; AND
- Not out of temperature control for more than 2 hours

All oysters harvested under Vp Plan must be cooled to 50°F w/in 10 hrs (internal temp)!

Shucking

Condition	Total Exposure (Hours)
Previously Refrigerated ≤ 45° F	4
Unrefrigerated	3
Heat-shocked	2

Shipping

- Shipped with ice; OR
- Pre-chilled conveyance at or below 45° F; AND
- Internal product temperature at or below 50°F prior to shipment; UNLESS
- Shipment time < 4 hours or time/temperature recording device

All oysters harvested under Vp Plan must be cooled to 50°F w/in 10 hrs (internal temp)!

Recall Plans

- Timely notification to DEC
- Timely notification to consignee(s)
- Effective removal of affected product

Labeling

- Lot numbers
- AK number
- Name and address
- Net weight
- Applicable federal rules

Sanitation Controls

Handwash
&
Toilet Facilities

Cross-Contamination

Water Safety

Toxic Compound Use, Storage, Labeling

Protect from Adulterants

Exclude Pests

Condition & Cleanliness of Food Contact Surfaces

Employee Health

SHELLFISH

Planning to commercially harvest, sell, ship, pack, or shuck molluscan shellfish? Below are resources to help get you started. Contact George Scanlan at (907)269-7501 or 1(87)SAFE-FOOD for more information.

To view a list of approved dealers, harvesters, and dive vessels, click here.

IN THE NEWS

- Response to NOAA - Jan 23, 2014 China Geoduck Letter
- Radiation Concerns in Alaska
- Recreational Shellfish Harvesting

APPLICATIONS

Now Accepting 2015 Applications

- 2015 Seafood Processor Application
- 2015 Seafood Processor Instructions
- 2015 Geoduck Dive Vessel Applica
- 2015 Shellfish Harvester Applicat

- 2014 Permit Applications

Export Certificate Application

- Main Forms Page

SHELLFISH FACILITIES

- Specific Requirements
  - Bioterrorism Registration
- HACCP & Sanitation
  - Blank Daily Sanitation Report
  - Blank Daily Temperature Record
  - Blank Daily Receiving Record
  - Blank Shellstock Harvest/Transportation Cooling Log
  - HACCP/SSOP Fact Sheet
  - UC Davis HACCP Resources
- Shellstock Shipping Requirements Facts

BIOTOXIN PLANS

- 2013 Crab PST Monitoring Plan
- 2013 Geoduck Clam Biotoxin Monitoring
- 2013 Shellfish Other than Geoducks Biotoxin Monitoring Plan

GROWING WATER

- 2013 Vibrio Control Plan
- Blank Weekly Water Temp Monitoring Log
- Sampling
  - Growing Water Sample Collection Form
  - Whirl-Pak Bag Instructions
  - Whirl-Pak Bag Video
- Classifying Growing/Harvest Areas Facts

GENERAL REQUIREMENTS

- NSSP-MO
- State Requirements (18 AAC 34)
- Code of Federal Regulations
- Environmental Health Laboratory (DEC)
- Commercial Shellfish Permit Fact Sheet

HELPFUL ALASKA LINKS

- ADF&G - Aquatic Farming Permits
- ADF&G - Commercial Dive Fisheries
- ADF&G - Shellfish Commercial Fisheries
- Aleutian Pribilof Islands Assoc PSP
- Aquaculture in Alaska (MAP)
- Aquatic Farming Program (DNR)
- Fishbiz (MAP)
- Office of Fisheries Development (DCCED)
- SE AK Regional Dive Fishery Association (SARDFA)
- UAA -Business and Marketing

RESOURCES

- Alaska Shellfish ID Chart
- Partial Key for Alaska Bivalves
- Interstate Shellfish Shippers List
- Interstate Shellfish Sanitation Conference
- Paralytic Shellfish Poisoning Fact Sheet
- PSP Resources
- Norovirus Prevention Packet
- FDA Coop Program - Safe Shellfish

www.dec.Alaska.gov/eh/fss

George Scanlan, Shellfish Coordinator
Food Safety & Sanitation | EH | DEC | Alaska

907.269.7638

George.Scanlan@Alaska.gov

CERTIFICATE OF SHELLFISH DEALER EDUCATION TRAINING

This is to certify that

Has successfully completed the Dealer Education Training

GEORGE SCANLAN

ADEC SHELLFISH PERMIT COORDINATOR

Date: