# Cooler Process Study

### Cooling requirements

- Clams and oysters not under VPCP
  - 50F within 10 hours of refrigeration (or prior to shipment if sooner than 10 hours)
- Oysters under VPCP
  - 5 hours from refrigeration to 50F
- On vessel Rapid Cooling

#### Cooler Process Study - Purpose

- The dealer can demonstrate the ability of the cooler to achieve 50F within required times using mechanical refrigeration
- Once completed, the dealer would no longer need to verify 50F for each day of harvest

#### Cooler study

- Study shall last 3 days
- Record the internal shellstock temperature prior to loading into the cooler
- Record the days maximum air and water temperatures in the vicinity of the harvest area
- Record the internal temperature of shellstock hourly for ten hours (or until 50F is reached for 2 consecutive hours)
- Dealer shall complete a cooler study 3 times throughout the summer
  - (1) a week prior to VPCP controls
  - (2) at the first 10 degree air or water increase
  - (3) At maximum load air and water temperatures

### Cooler study duration

- The dealer shall continue normal 50F verification until study is complete
- Once completed submit to DoAG for approval
- Once approved
  - monitor only ambient cooler temperature
  - Repeat 3 day trials under the 3 conditions annually
- Cooler study will need to be repeated for any new coolers or major repairs to coolers

## Cooler Study Log

#### **HACCP Cooler Study Log**

Company Name:			Year:
Address			CT#
Type of sample (Circle one):	Pre-VPCP	Air temp increase by 10F	Maximum load

COOLER NAME:		DATE:			
PRODUCT:		HARVEST WATER TEMP:			
TIME	HOURS FROM	OUTSIDE	Shellstock	COOLER	NOTES
	REFRIGERATION	AIR TEMP	TEMP	TEMP	(INCLUDE STORAGE FORM)
	At harvest				
	Into refrigeration				
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

#### Cooler study- additional consideration

- Dealer shall have and monitor a continuous recorder in the cooler
- Dealer shall still record Shellstock temperature at time of shipment as is required in Chapter IV
- Dealer shall redo cooler study after major cooler work
  - (ie. Replace a unit, major failure)
- DoAG will begin to debit firms for not recording 50F verification