STATE OF CONNECTICUT
DEPARTMENT OF AGRICULTURE
Bureau of Aquaculture & Laboratory Services

Bryan P. Hurlburt
Commissioner

David H. Carey
Director

Seaweed Producer Recordkeeping Requirements

Sanitation Standard Operating Procedures (SSOP Seaweed)

The Bureau provides Seaweed Producers with a form that can be used to record sanitation items, or a form can be developed by the producer.

It is important to develop and implement an effective sanitation program for your operation with standard operating procedures. These procedures should address the relevant eight key sanitation conditions or areas called out in the 1997 FDA seafood regulation.

1. Safety of water
2. Condition and cleanliness of food contact surfaces
3. Prevention of cross-contamination
4. Maintenance of hand washing, hand sanitizing and toilet facilities
5. Protection from adulterants
6. Labeling, storage and use of toxic compounds
7. Employee health conditions
8. Exclusion of pests

Sanitizing Procedures

SANITIZING After food contact surfaces are cleaned, they must be sanitized to eliminate harmful organisms. Sanitizers must be approved for use in food service operations. The most commonly used sanitizers are chlorine and quaternary ammonium. Sanitizers must be mixed and applied according to manufacturer directions.

For food contact surfaces, the recommended concentration is 100 to 200 ppm (parts per million) for chlorine and 200 ppm for quaternary ammonium. Concentration must be tested using the appropriate test strip. Both sanitizers and test strips are available from restaurant supply companies. The procedure for sanitizing surfaces is to first rinse the surface well with water, then use a food service approved detergent for cleaning, rinse detergent well, then apply sanitizer and allow to air dry. Knowing the concentration of sanitizers is critical, as too high a concentration creates a toxic environment, and too low a concentration will be ineffective at killing microorganisms.

It is recommended that cull table, pallets, baskets and any surface that the seaweed will come into contact with are cleaned and sanitized before harvest. Equipment surfaces may become contaminated by bird or rodent dropping, or microorganisms in sediments, and should be sanitized prior to harvest and as needed during the day.

Harvest Log

Traceability is an important procedure for every food producer to establish. A harvest log template has been provided as an Excel spreadsheet. This document can be modified to suit your operation. A harvest log should be kept along with sales logs and invoices in order to allow product to be traced back to the growing area in case of an illness or recall.

Recalls (Recalls 101 and Seaweed Producer Recall Procedure)

When an FDA-regulated product is either defective or potentially harmful, recalling that product—removing it from the market or correcting the problem—is the most effective means for protecting the public. An FDA Recalls 101 brochure and template recall procedure have been provided for use.

Temperature Control Verification (CoolerLog_Calibration)

HACCP recordkeeping requires producers to verify that critical limits for temperature are being maintained. A cooler storage log and calibration procedure has been provided that can be used for recording and verification of cooler temperatures or temperature control. Monthly calibration of thermometers is also required for HACCP verification.

Company Name_____CT #_____

Address_____ Vessel Name_____ Year_____

Date														
Start Harvest														
End Harvest														
Harvest Area														
Species														
# Bags/Totes														
Time Arrived at Dock														
	Sold To	Time Sold	Sold To	Time Sold	Sold To	Time Sold	Sold To	Time Sold	Sold To	Time Sold	Sold To	Time Sold	Sold To	Time Sold
Sold to Whom														
Time Refrigerated														
Name of Boat Capt. And Initials Daily														

Weekly Review by: (Full Signature Required) _____ Date:

DAILY SANITATION AUDIT FORM – Aquaculture Seaweed Producer

Firm Name: _____ YEAR:_____

Firm Address: _____

Enter Date of entry----------→ **Enter Time of entry----------→**	_/_	_/_	_/_	_/_	_/_	_/_	_/_
SAFETY OF WATER: approved water supply, check for backflow devices							
CONDITION/CLEANLINESS OF FOOD CONTACT SURFACES: Ice shovels, Ice scoop, bins, ice machines, and shellfish contact surfaces Cleaned, sanitized, good condition, properly stored							
Concentration of Sanitizer (Record Amount) Chlorine 100-200 ppm, Iodine 25 ppm, Quaternary Ammonia 200 ppm Test Kits provided and used to check solution.							
PREVENTION OF CROSS CONTAMINATION: Product is protected from splash, condensate drip, not stored below raw food							
Product not directly in contact with floor of cooler. Product separated by lot							
Personal items not stored in processing area. No eating or tobacco use in processing area							
Employee hands are washed after any breaks from work							
MAINTENANCE OF HAND-WASHING, HAND-SANITIZING, AND TOILET FACILITIES: Toilet and Hand-washing facilities are checked for cleanliness, supplies and warm water							
PROTECTION FROM ADULTERANTS: Light fixtures shielded, product protected during transfer							
PROPER LABELING, STORAGE AND USE OF TOXIC COMPOUNDS: Cleaning supplies stored properly and away from product							
All supplies labeled to identify contents and intended use							
CONTROL OF EMPLOYEES WITH ADVERSE HEALTH CONDITIONS: Employees with unhealthy conditions are reassigned to other duties							
EXCLUSION OF PESTS: There are no pest, rodents, insects, etc., in area							
Initial entry when checked ----------→							

Please note below any corrections that had to be made to the above listed items

Enter Date of entry----------→ **Enter Time of entry----------→**	_/_	_/_	_/_	_/_	_/_	_/_	_/_
SAFETY OF WATER: approved water supply, check for backflow devices							
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EXCLUSION OF PESTS: There are no pest, rodents, insects, etc., in area							
Initial entry when checked ----------→							

HACCP Cooler Storage Log

Year______________

COMPANY NAME____

Address_____________________________________ CT # __________

Record temperatures twice daily while holding product, initial and record times

Date	Harvest Date	Harvest Area	Time into Cooler and Initials	Cooler Temp IN	Cooler Temp Out	Time out and Initials

Haccp Review Signature_________________Date_______ Haccp Review Signature______________________Date_________

Haccp Review Signature_________________Date_______ Haccp Review Signature______________________Date_________

Monthly Thermometer Calibration Record

Firm Name: _____

Firm Address: _____

The firm's thermometer probe(s) will be calibrated by placing the probe in a crushed ice / water slurry, stirring vigorously and reading/recording the temperature. This temperature should be 32° F, the melting point of ice. If the probe is not 32°F, the probe can be adjusted by using a wrench to rotate the screw under the backside of the dial to read 32° F when placed in the ice slurry. Next, place the probe in cooler for 3-5 minutes near the cooler thermometer, allowing time for probe to adjust. The temperatures of both are recorded and compared; any difference noted. The corrective action(s) must be recorded. These records must also be reviewed and verified.

	January	February	March	April	May	June	July	August	September	October	November	December
Temperature of probe when placed in the ice slurry												
+/- Adjustments made to the probe dial												
Difference between cooler thermometer and probe (+/-)												
Corrective action taken when cooler thermometer does not record the same temperature as probe when compared												
Employee Initials												
Review Signature and date												

CT State Department of Agriculture Bureau of Aquaculture (DA/BA) Licensed Aquaculture Producers
RECALL PROCEDURES

Producer Name: _____Certification Number: CT_____
Signature of Responsible Party Adopting this Procedure:_____

This recall procedure is to be kept on file by your company in an easily-accessible location. Should the DA/BA or a Producer (Firm) initiate a recall of seaweed product because of public health concerns, the DA/BA will monitor the progress and success of the recall. The DA/BA will immediately notify the Food and Drug Administration (FDA) and the Authorities in other states if products involved in the recall have been distributed outside of CT. Each Authority involved in a recall will implement actions to ensure removal of recalled product from the market and issue public warnings if necessary to protect public health. The FDA will decide whether to audit or issue public warnings after consultation with the DA/BA and/or other Authorities and after taking into account the scope of the product distribution and other related factors. If the FDA determines that the Authority in any state involved in the recall fails to implement effective actions to protect public health, the FDA may classify, publish and audit the recall, including issuance of public warnings when appropriate.

The DA/BA will monitor the progress and success of all recalls within CT. Should there be a need to initiate a recall either by direction of the DA/BA or by a licensed seaweed producer, you are required to adhere to the following:

1) Promptly follow the directions of the DA/BA in reacting to a recall and/or promptly notify the DA/BA by telephone when any situations come to your attention which could warrant initiating a recall. These situations could be any reports of illness, biotoxin closures, sewage spills, petroleum products spills, etc.

2) Once informed that a DA/BA directed recall or a Firm-initiated recall is implemented promptly contact each of your customers by telephone or in person and notify them about the recall. Direct your customers to stop all sales and secure any products involved in the recall that may still be on hand.

3) Properly identify each bag/container of seaweed involved in the recall with an On-Hold for Recall placard or marker with date and separate them from other products not involved in the recall. These recall products must be properly secured.

5) Request that your customers report back to you as soon as possible, but no later than 24 hours, where the recalled products were distributed and whether your customers still have any product on hand. Maintain an accurate Recall Account Summary Report of products sold to each of your customers and the current disposition of the products:

i) Amount sold to each customer during the recall period
ii) Amount still on hand at your facility
iii) Amount still on hand at each of your customers facilities
iv) Amount already sold and consumed and not returnable by each of your customers

1. If there is recalled product, you will instruct your customers to return the product to you for proper securing of it in your facility or to hold it in a separate location at their facility and clearly mark it as not for sale and wait for final disposition instructions.

2. You will promptly notify the DA/BA as to where the entire recalled product is located. You will coordinate with the DA/BA or the local health jurisdiction in your area to witness destruction of the product. If required, all product returned to you will be destroyed in the presence of a witness from the DA/BA or a local or state health jurisdiction. You will provide a Recall Account Summary Report of the recalled product to the DA/BA within 48 hours.

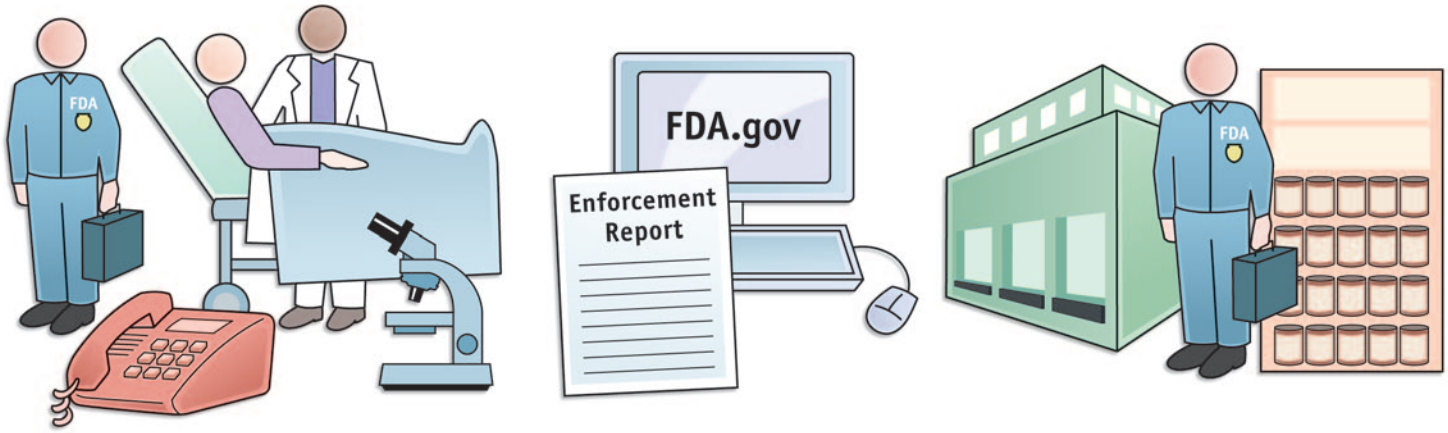
3. A list of your current direct customers and their telephone numbers will be maintained in your records for recall notification.

The DA/BA contact telephone numbers for recall notification purposes are 203-874-0696 during business hours and 203-209-4023 during non-business hours.
The following customer notification list is for your use in contacting your customers.

RECALL CUSTOMER NOTIFICATION LIST

FDA 101: Product Recalls

From First Alert to Effectiveness Checks



First Alert

FDA hears about product problems through company notification, agency inspections and adverse event reports, and through CDC.

Alerting the Public

FDA posts regular updates about recalls to its Web site, and all recalls appear in the agency's weekly Enforcement Reports.

Effectiveness Checks

FDA reviews all of a company's corrective actions to determine when a recall is complete.

Once a product is in widespread use, unforeseen problems can sometimes lead to a recall. Contaminated spinach, for example, led to the recent recall of spinach products under multiple brand names. Contaminated peanut butter led to the recall of thousands of jars of two popular brands. In both cases, FDA responded immediately to minimize harm.

When an FDA-regulated product is either defective or potentially harmful, recalling that product—removing it from the market or correcting the problem—is the most effective means for protecting the public.

Recalls are almost always voluntary. Sometimes a company discovers a problem and recalls a product on its own. Other times a company recalls a product after FDA raises concerns. Only in rare cases will FDA request a recall. But in every case, FDA's role is to oversee a company's strategy and assess the adequacy of the recall.

First Alert

FDA first hears about a problem product in several ways:

- A company discovers a problem and contacts FDA.
- FDA inspects a manufacturing facility and determines the potential for a recall.
- FDA receives reports of health problems through various reporting systems.
- The Centers for Disease Control and Prevention (CDC) contacts FDA.

When it comes to illnesses associated with food products, Dorothy J. Miller, Director of FDA's Office of

RECALL CLASSIFICATIONS These guidelines categorize all recalls into one of three classes, according to the level of hazard involved:

Class I Dangerous or defective products that predictably could cause serious health problems or death. Examples include: food found to contain botulinum toxin, food with undeclared allergens, a label mix-up on a lifesaving drug, or a defective artificial heart valve.

Class II Products that might cause a temporary health problem, or pose only a slight threat of a serious nature. Example: a drug that is under-strength but that is not used to treat life-threatening situations.

Class III Products that are unlikely to cause any adverse health reaction, but that violate FDA labeling or manufacturing laws. Examples include: a minor container defect and lack of English labeling in a retail food.

Emergency Operations, says that FDA generally first hears of these kinds of problems from CDC.

"CDC hears about such problems from state health departments that have received and submitted illness reports," she says. "An ongoing outbreak means that we have an emergency, and when there's a public health crisis like this, you need to tell the public immediately."

Alerting the Public

FDA seeks publicity about a recall only when it believes the public needs to be alerted to a serious hazard. When a recalled product has been widely distributed, the news media is a very effective way to reach large numbers of people. FDA can hold press conferences, issue press releases, and post updates to its Web site regularly, to alert people.

"It's about being as transparent as possible," says Catherine McDermott, public affairs manager in the Division of Federal-State Relations in FDA's Office of Regulatory Affairs. "If we feel there is that much of a health risk, we will offer media updates every day to give new information, and all that we know gets posted to FDA's Web site."

Not all recalls are announced in the media. But all recalls go into FDA's weekly Enforcement Report. This document lists each recall according to classification (see "Recall Classifications" box), with the specific action taken by the recalling firm.

FDA-regulated Products Subject to Recall

- *human drugs*
- *animal drugs*
- *medical devices*
- *radiation-emitting products*
- *vaccines*
- *blood and blood products*
- *transplantable human tissue*
- *animal feed*
- *cosmetics*
- *about 80 percent of the foods eaten in the United States*

Effectiveness Checks

FDA evaluates whether all reasonable efforts have been made to remove or correct a product. A recall is considered complete after all of the company's corrective actions are reviewed by FDA and deemed appropriate. After a recall is completed, FDA makes sure that the product is destroyed or suitably reconditioned, and investigates why the product was defective in the first place.

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