The Onboard DEC Inspection

This publication will help you prepare for an Alaska Department of Environmental Conservation (DEC) inspection as a direct marketer, processing seafood on a vessel less than 65 feet in length. It is a summary based on HACCP (Hazard Analysis Critical Control Point) and sanitation regulations, and other DEC requirements. This information may not be complete since regulations change. All processing regulations are available online at www.dec.state.ak.us/eh/fss/seafood/seafood.htm.

So, you've received your direct market permit from the state for next season. As captain of a small vessel processing your own fish onboard, your boat is now considered a food processing facility and you're the plant manager. You will need to prepare for an Alaska Department of Environmental Conservation inspection.

These tasks will help you get ready

Get organized. Your inspector will be looking for certain paperwork and documentation.

✧ Put all your paperwork, permits, and regulations in a three-ring binder or a folder that is easily accessible.

✧ Electronic recordkeeping is also acceptable.

✧ Get a copy of the DEC Seafood Processing and Inspection regulations (18 AAC 34). You need to be familiar with the special exemptions for direct marketers. To download the seafood regulations, go to www.dec.state.ak.us/regulations and choose Chapter 34.
**HACCP and sanitation: the foundation of food processing safety**

Two major protocols help you maintain the safety of your seafood processing operation. They are (1) the hazard analysis/HACCP plan you submitted with your direct marketing permit application, and (2) your sanitation plan and monitoring records.

**Hazard analysis/HACCP plan**

- Demonstrate that you understand the HACCP critical control points in your operation and that you can explain how your HACCP plan works.
- Provide a copy of your hazard analysis (HA), and if critical control points have been identified in your processing operation, your HACCP plan.
- If you had a HACCP-qualified individual prepare your hazard analysis/HACCP plan for your permit application, list the contact information for that person.
- Remember, this person is ultimately responsible for reviewing your processing records and revising your hazard analysis if you make any modifications to your operation (e.g., adding a new species).
- Reassess your HACCP plan or hazard analysis documentation annually. Ask your inspector about any new regulations (especially federal) that might require changes to your hazard analysis, your HACCP plan, or your all-important record-keeping.

**Sanitation plan and monitoring records**

As listed in the DEC regulations, you’ll need to document a sanitation plan for your operation and provide current sanitation monitoring records. Hints include:

- Make sure your written sanitation plan adequately addresses the “Sanitation Eight”—safety of water, food contact, cross contamination, hand washing and toilets, employee health, toxic compounds, adulterants, and exclusion of pests.
- If you employ a crew, employee health measures need to be noted in your operational notes. Remember to monitor employee health, even if the crew is just you.
- Daily record-keeping of sanitation procedures is critical, and you’ll be asked to produce the records for the inspector.
- Record-keeping is a good habit that will make you and your crew more aware of how you’re handling the food product, and will undoubtedly increase your product quality.
- The inspector will want to know if you are adequately monitoring all eight areas and will double-check that all areas are included in your records.
- The inspector will expect that you are taking corrective actions when adverse conditions are discovered in your process, and will also expect that you are documenting the corrective actions. Make sure you are doing both, and tell the inspector so.
- Finally, your sanitation records must accurately reflect onboard conditions. If your paperwork says you’re cleaning and sanitizing fish holds and processing surfaces, make sure there is no fish gurry or bits of flesh lying around in corners of the deck.

**Additional items direct marketers need to address before an inspection**

**Water source for processing**

A direct market fishing/processing vessel must be equipped with a wash-down hose or another means to supply enough water to the processing area and deck for cleaning and sanitizing. A garden hose with nozzle attached to a small overboard water pump, located near the processing tables, works well for keeping the operation clean while at sea. Make sure you can hook up to a city water source if you’re working from your vessel in port.

**Approved marine head**

Smaller vessels generally don’t have sophisticated marine head systems. But you are now dealing with food processing; a deck bucket doesn’t cut it anymore. You need a “port-a-potty” system (large enough to accommodate the number of crew for the duration of the voyage), a U.S. Coast Guard–approved holding tank, or an onboard marine sanitation device that treats sewage for approved disposal at sea.

**Hot running water, soap, paper towel holder, and a sign**

Again, you’re handling a food product. You must have a hot running water source (109°F or higher) on your vessel for hand washing, and your system must achieve that temperature within 20 seconds. Paper or cotton towels used to dry hands after washing must be secured in a holder or rack. Once you’ve washed your hands, you don’t want to be chasing a roll of paper towel all over the countertop, or worse yet, onto the floor.

A posted hand washing sign is required. Download one from the DEC Web site: www.dec.state.ak.us/eh/Iss/establishments/stickers.htm.
Cleaning and sanitizing are two separate activities

Cleaning detergents used in processing operations must be industrial/commercial/restaurant grade. Household cleaning detergents—good-smelling cleaners—aren’t allowed around food. Clorox-based detergents aren’t allowed either. Once you’ve cleaned all surfaces, you’ll need to rinse and sanitize them. Follow your sanitizer instructions for water-to-sanitizer ratios, and keep a supply of accurate sanitizer concentration test strips, or a test kit, on board. Think of these tools as your sanitation reality check! Record the readings in your daily sanitation paperwork.

Labeling detergent containers
If you store your cleaning detergent in smaller bottles for ease of handling, clearly write the detergent ingredients and water mix ratios on the secondary containers.

Batch chlorination
Like shore-based processors, all processing water used for final rinsing of a seafood product must be changed as often as necessary to prevent buildup of blood, slime, or other contamination that might result in an adulterated seafood product.

Most municipal water systems maintain less than 1.0 ppm of free chlorine residual. Final seafood rinsing water should range between 5 and 10 ppm. Free chlorine concentrations for equipment sanitation can range between 50 and 100 ppm; some plants use a higher concentration for sanitizing floors. Ask your inspector for specifics.

Use the table below as a guide for batch chlorination of (1) rinse water for product final process, and (2) cleanup water. Let your treated water sit for 20 minutes to reach full strength.

<table>
<thead>
<tr>
<th>Water (gallons)</th>
<th>Dry chlorine concentration</th>
<th>Liquid chlorine concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70%</td>
<td>25%</td>
</tr>
<tr>
<td>20</td>
<td>0.7 T</td>
<td>1.75 T</td>
</tr>
<tr>
<td>40</td>
<td>1.25 T</td>
<td>3.25 T</td>
</tr>
<tr>
<td>60</td>
<td>1.75 T</td>
<td>5 T</td>
</tr>
<tr>
<td>80</td>
<td>2.25 T</td>
<td>6.75 T</td>
</tr>
<tr>
<td>100</td>
<td>3 T</td>
<td>8 T</td>
</tr>
<tr>
<td>150</td>
<td>4.5 T</td>
<td>12 T</td>
</tr>
<tr>
<td>200</td>
<td>6 T</td>
<td>16 T</td>
</tr>
</tbody>
</table>

16 tablespoons = 1 cup, dry or liquid measure.

1. disinfected to maintain a measurable residual of free chlorine or another approved disinfectant (processing water must be tested for the residual at least once each day during the operating season; a daily log of the disinfectant residuals must be kept as required).

2. changed as often as necessary to prevent buildup of blood, slime, or other contamination that might result in an adulterated seafood product.

Final rinsing of the seafood product is the last shield against bacteria contamination.

“Exclude pests” means covering the deck in your processing area and no pets onboard

Marketers need to cover the deck area where processing is taking place. It’s not only to isolate the food product from bird airdrops—potential contamination can be exhaust stack soot or metal shavings from operating overhead rigging. At a minimum, you’ll need a clean tarp at least 20 millimeters thick, covering the processing area. According to DEC regulations, pets are not allowed near the processing or fish holding area.

Your vessel is a food processing facility

Remember, as a direct marketer preparing fish for delivery into the marketplace, you have evolved your fishing vessel both practically and legally into a food processing facility. It’s an exciting and doable activity. DEC has lots of information for small vessel processing on their Web site. Utilize the expertise of your inspector like you do with your CPA, lawyer, or Web designer. Remember: safe food product handling is fundamental to your seafood business success.

For more information

Other direct marketing and food safety publications available from the Alaska Sea Grant Marine Advisory Program include

• Fisherman’s Direct Marketing Manual by Terry Johnson, MAB-53
• Common Mistakes in HACCP series by Liz Brown, ASG-39–ASG-44
• Care and Handling of Salmon: The Key to Quality by John Doyle, MAB-45

To order these and other publications from Alaska Sea Grant, visit our bookstore online at www.alaskaseagrant.org/bookstore, or call toll free (888) 789-0090.

The Alaska Sea Grant Marine Advisory Program (MAP) provides HACCP and sanitation certification training statewide several times a year. Visit www.marineadvisory.org for schedules or contact MAP to arrange training in your community.

Gallons of water and tablespoons of chlorine required to give 50 ppm of free chlorine residual. For 100 ppm of free chlorine residual, double the amount of chlorine. For 200 ppm of free chlorine residual, multiply the amount of chlorine by four.

Source: Alaska Department of Environmental Conservation Seafood Processing & Inspection Regulations 18AC 34.080.
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The Alaska Sea Grant College Program is a marine research, education, and extension service headquartered at the University of Alaska Fairbanks School of Fisheries and Ocean Sciences.

The Alaska Sea Grant College Program is supported by the National Oceanic and Atmospheric Administration Office of Sea Grant, Department of Commerce, under grant no. NA 16RG2321 (project no. A/161-01 and A/151-01), and by the University of Alaska with funds appropriated by the state.