

Salmon Roe

Guide for Alaskan Salmon Roe Recovery Vessels

Higher prices for salmon roe products are placing more emphasis on salmon "roe stripping" (roe recovery) by fishing vessels in Alaska. This brochure was prepared to help you, the salmon "roe stripping/roe recovery" fishing vessel operator, understand what steps you must take to meet the regulations outlined in ADEC's *"Seafood Processing and Inspection Regulations"* (18 AAC 34). Because "roe recovery" is a form of seafood processing, your vessel must receive a permit from the ADEC and follow these regulations during operation. In this brochure, we have intentionally emphasized the simplest and most inexpensive means of meeting the regulations to accommodate the special concerns of the "roe recovery" vessel.

Vessel Requirements

Clean and Simple.

There are many steps between catching a salmon in Alaska's pristine waters and delivering that fish and its roe to a market. By far the most important of these steps is the maintenance of a clean and sanitary work place onboard. No matter how delicately you handle your salmon and the roe by-product, if you do not routinely clean and sanitize the surfaces on your vessel, these products will very likely become contaminated. Contaminated roe products present not only a health hazard to potential consumers, but may also be rejected by the buyer. Prepare your vessel in advance and then take proper care of your products.



Before the Fishing Season

Cover It Up.

To protect your salmon and roe products from contamination on the fishing grounds, you must cover your vessel's processing area. Your vessel's fish and roe-contact surfaces must be covered with either a permanent or temporary cover to protect the contact surfaces from airborne contamination. A temporary cover can be as simple as a 20 mil commercial grade tarp, however it must be easily cleanable. If your vessel's processing area is sheltered by a temporary cover, all exposed processing surfaces and equipment must be cleaned and sanitized at the beginning of each work day to remove any contamination due to exposure to the elements.

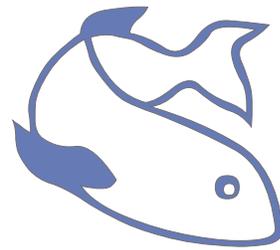
Seal It Up.

To prevent product contamination, begin by sealing all vessel surfaces where fish are processed, stored, etc., and which fish and roe products will come in contact with.

If you have a fiberglass or aluminum hulled vessel, with fiberglass or aluminum "fish contact" surfaces, you may not need to take any further steps to seal the surfaces. If, however, your boat has a wood hull, all wood processing and fish contact surfaces must be completely sealed (covered/surfaced) with a non-porous, cleanable and colored (See Appendix) sealant before a fish processing permit will be issued. Pay special attention to any surfaces that may be cracked, and joints where different materials come together. It will be impossible to keep a cracked, split, or gouged surface clean because bacteria can collect in such depressions. Any crevices should be filled and smoothed-over to aid in scrubbing, rinsing, and sanitizing.

Keep It Contained.

All sewage must be contained in a USCG-approved marine sanitation device and disposed of in an approved manner, to prevent fecal contamination of the product, contact surfaces and the water used for processing. Basically, there are three ways you can manage sewage on board your vessel under state regulations: 1) a USCG approved onboard marine sanitation device which treats sewage for disposal at sea, 2) a USCG approved holding tank system, or 3) a "port-a-potty" (large enough to accommodate the number of crew for the duration of the fishing period). Sewage from the holding tank must be disposed of in accordance with USCG regulations - port-a-potty contents must be disposed of at an approved dump station or home facility.



Under state regulations, if you have a holding tank on your fishing vessel, you must maintain a "sewage discharge log". This is simply an organized, permanent record of the date, time and location of the sewage disposal.

Keep It Clean.

The quality of the salmon roe you recover will be greatly effected by how frequently you clean and sanitize your vessel decks, storage holds, and your equipment (knives, gloves, rain gear, totes and gutting troughs). The volume and quality of your processing water will determine the success of your small vessel processing operation. You must use clean water, and lots of it!

By regulation you must have a "written cleaning and sanitizing schedule" for the roe recovery



process. This schedule must describe the steps taken to thoroughly clean and sanitize the processing areas and equipment, cleaning and sanitizing chemicals used and when they will be performed. By regulation, you must keep vessel disinfectant (chlorine) use and sanitation records.

You may only use cleaning and sanitizing products listed in the "*List of Proprietary Substances and Nonfood Compounds*" (See Appendix). Similar products available at local stores are usually "house-hold use" strength and do not meet the higher standards for food service use. Avoid using either off-the-shelf abrasive or pine-scented



It is very important to protect your product from possible hydraulic fluid contamination. On deck, use collection pans under equipment to catch leaking fluid, and regularly check all hydraulic lines, especially those that are located in the fish processing area, for breakage and leaks. Repair all hydraulic leaks as soon as possible.

Keep Yourself Clean.

You are required to provide hand washing facilities for your crew in (or convenient to) the marine head. This can be as elaborate as a sink with hot and cold-running water or as simple as a container with a spigot. In the processing area you may use a two-bucket cleaning station: the first bucket for soap and water wash, a wash-down hose rinse and the second bucket for a disinfectant hand dip.

On board potable water supplies must be received from an approved treated drinking water source.

Drinking non-potable water can infect your crew with a variety of waterborne illnesses. Tap water from a port facility connected to the municipal water supply, a regularly treated or tested well, and commercially bottled water are all approved sources. Any drinking waters from an unapproved source, such as a stream, spring or lake; must be chlorinated, with a measurable residual no more than 0.1 PPM chlorine. This may be accomplished by adding 1 teaspoon (1t) of liquid chlorine to 50 gallons of water. Caution must be used when filling vessel tanks from municipal or other approved supplies - use a clean sanitized hose, and prevent contamination from entering the fill point.

During the Fishing Season, Handle With Care.

Good housekeeping practices by you and your crew will help ensure that your vessel, your crew, and the salmon roe product you produce are safe and free from spoilage and disease-causing bacteria. Here are a few more steps you can take to keep your roe recovery operation clean.

Unsanitary ice or processing water can contaminate your roe, making it unfit for human consumption. Dump all dirty ice following a fishing period, and clean and sanitize the ice holding space. Be certain that the ice you receive is from an approved source (a certified processor or ice house) and that you chlorinate your processing water. Batch chlorinating can be accomplished by adding one capful (1T) of liquid chlorine to 20 gallons of fresh or saltwater, and allowing the mixture to sit for 20 to 30 minutes before use.

Protect your product - rain or shine.

In addition to the cover over the process area mentioned earlier, you must make every effort to keep birds, flies, animals, hydraulic oil, and splashing water away from your catch and recovered roe. Fish tote lids should stay fastened in place; roe pail lids should be snapped into place as soon as possible once the pail is filled with roe.



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Take extra precautions to use only properly cleaned and sanitized roe pails during your operation. Do not nest dirty buckets inside of cleaned and sanitized buckets. Do not store your clean, sanitized buckets "right-side-up", or outside of a covered area.

Keep it Cool.

Maintain proper salmon and salmon roe temperature by keeping all such products iced and at a temperature under 40 degrees F.

The only good accident is no accident. You can protect your product from accidental chemical spills. Stow unused cleaning and other chemicals away from the processing area (preferably inside a cupboard inside the cabin of the vessel) to prevent product contamination due to spills and improper usage. Make sure that all chemicals and poisons are stowed in their original containers or repackaged with their original labels prominently displayed.

