



What are the rules with Reduced Oxygen Packaging (aka Vacuum Packing)?

What is Reduced Oxygen Packing (ROP)? The reduction of the amount of oxygen in a package by removing oxygen.

If I squeeze the air out of a Ziploc bag is this considered ROP? No. This definition applies to vacuum packaging in which air is removed from the package of food and the package is hermetically sealed so that a vacuum remains inside the bag.

Are there any risks associated with ROP? The main risk associated with ROP is foodborne botulism. *Clostridium botulinum* is a bacterium that will only grow without the presence of oxygen. When botulism grows it produces a toxin that can cause paralysis or death if eaten. Needless to say, this is not something to be taken lightly.

What can be vacuum packed with low risk? Raw pork, poultry, and beef may be vacuum packed and frozen, as long as it is thawed at 41F or below. Other products with low risks include fruit, produce, and baked goods.

What about prepackaged food that I purchased from the store, such as lunchmeat. Can I vacuum pack it and freeze it? Yes. This can be vacuum packed a frozen because it meets the two barriers requirement. However, it is highly recommended that facility open the packages when thawing as a precautionary measure.

My facility smokes its own meat and then vacuum packages it. Is this okay? No. No cooked meat produced in the facility may undergo ROP without a variance. It must be purchased from a USDA licensed processing plant.

What about raw fish? Raw fish is considered a high risk food. Facilities must undertake extra steps to ensure its safety. A facility that wishes to ROP fresh fish to freeze must have a HACCP plan written down; educate all employees and staff regarding the HACCP plan, and follow it! The HACCP plan must outline how these guidelines will be met:

- Raw fish must be frozen prior to vacuum packing/ROP.
- Fish must remain frozen.
- When fish is thawed, the packaging should be opened to break the vacuum and allow oxygen in.

What is a HACCP Plan and how do I create one? A HACCP plan means a written document that outlines the formal procedures for following the Hazard Analysis Critical Control Point principles developed by the National Advisory Committee on Microbiological Criteria for Foods. An example HACCP plan for raw fish and a blank form are included with this packet.

What do the Food Sanitation Rules say about Reduced Oxygen Packaging?

3-502.12 Reduced Oxygen Packaging, Criteria.*

(A) A food establishment that packages food using a reduced oxygen packaging method and **Clostridium botulinum** is identified as a microbiological hazard in the final packaged form shall have a HACCP plan that contains the information specified under ¶ 8-201.14(D) and that:

(1) Limits the food packaged to a food that does not support the growth of **Clostridium botulinum** because it complies with one of the following:

(a) Has an aw of 0.91 or less,

(b) Has a pH of 4.6 or less,

(c) Is a meat or poultry product cured at a food processing plant regulated by the U.S.D.A. using substances specified in 9 CFR 318.7 Approval of substances for use in the preparation of products and 9 CFR 381.147 Restrictions on the use of substances in poultry products and is received in an intact package, or

(d) Is a food with a high level of competing organisms such as raw meat or raw poultry;

(e) Is a food that has been subjected to a process or control that can be supported by scientific data and is approved the Department of Human Services.

(2) Specifies methods for maintaining food at 5oC (41oF) or below; **33**

(3) Describes how the packages shall be prominently and conspicuously labeled on the principal display panel in bold type on a contrasting background, with instructions to:

(a) Maintain the food at 5oC (41oF) or below, and

(b) Discard the food if within 14 calendar days of its packaging it is not served for on-premises consumption, or consumed if served or sold for off-premises consumption;

(4) Limits the shelf life to no more than 14 calendar days from packaging to consumption or the original manufacturer's "sell by" or "use by" date, whichever occurs first;

(B) Except for fish that is frozen before, during, and after packaging, a food establishment may not package fish using a reduced oxygen packaging method.

(C) The Department of Human Services may require the permit holder to obtain a variance as specified in § 8-103.10 and under § 8-103.11 to produce products with reduced oxygen packaging.

Firm Name: Dawn's Deli and Smokehouse

Signature of Person Approving HACCP plan: _____

Firm Address: Fox Lake Rd, Smithville, OR 97311

Product Description: VacPac Farm Raised Hot Smoked Salmon

Date _____

Method of Storage and Distribution: Refrigerated Vacuum Packaged Smoked Salmon

Intended Use and Consumer: Ready to Eat Wholesale and Retail Sales

Critical Control Points	Hazards	Critical Limits	Monitoring				Corrective Action(s)	Records	Verification
			What	How	Frequency	Who			
Receiving Supplier Certification pg 140	Drugs Chemicals	Each lot has certificate of proper drug usage	Current certificate of proper drug usage	Visual	Each Lot	PIC	Reject Lot and Discontinue Use from that Supplier until Current Certificate is Available	Receiving Record And Proper Drug Use Certificate from Fish Farmer	Weekly Record Review Or Record Review as Needed
Brining	Pathogen C. Bot	Min Brine Time Max Thickness Min Salt Content	Time in and out of brine Chunk size Recipe Salometer	Clock Measure Salometer Reading	Each lot	PIC	Extend Brine Time Resize -Smaller Increase Salt %	Brining Record Size Record Salometer Record	Weekly Record Review
Drying Smoking	Pathogen C. Bot	Minimum Time in Smokehouse	Recording Chart Clock or Visual Clock	Recording Chart Visual Time and Temp	Each lot	PIC	Extend Time in Smokehouse to Increase Drying (func of wps) pg 177 3.5 vacpac no Nitrates 3.0 vac pac w/ 100ppm nitrates 2.5 No vac pac	Smoker Records Recording Chart or Time Temperature Thermometer Calibration Record	Weekly Record Review Thermometer Calibration w/ Procedures on File Annual/qtr wps test results

Critical Control Points	Hazard	Critical Limits	Monitoring				Corrective Action(s)	Records	Verification
			What	How	Frequency	Who			
Cooking	C. Bot	145° F for 30 minutes	Time and Temp	Recording Chart Visual Time and Temp	Each Lot	PIC	Re-cook to meet CL or Destroy	Recording Chart w/ cooking temps shown	Weekly Record Review Thermometer Calibration w/ Procedures on File
Cooling	C. Bot	Not more than 2 hrs Above 70°F After Removal from Smoker and Not More than 2 Hours Above 50°F	Time Above 70° F after Removal from Smoker and Time Above 50° F	Clock and Thermometer	Each lot	PIC	Ice, Hold Evaluate Or Destroy	Cooling Log Thermometer Calibration w/ Procedures on File	Weekly Record Review Thermometer Calibration w/ Procedures on File
Storage	C. Bot	Storage at or Below 40° F	Cooler temp	Continuous Monitoring	Continuous or 4x day	PIC	Ice, Hold Evaluate Or Destroy	Storage Log or Continuous Monitoring Chart	Weekly Record Review Thermometer Calibration w/ Procedures on File
Labeling	C. Bot Allergens	Labeled Keep Refrigerated Label includes all allergens in ingredient label	Each Label	Visual Label Inspection	Each lot or Package	PIC	Relabel Or Recall	Labeling Log Record	Weekly Record Review

