Reduced Oxygen Packaging

"Reduced oxygen packaging" means the reduction of the amount of oxygen in a package by removing oxygen; displacing oxygen and replacing it with another gas or combination of gases; or otherwise controlling the oxygen content to a level below that normally found in the atmosphere (approximately 21% at sea level); and a process as specified in this definition that involves a food for which the hazards *Clostridium botulinum* or *Listeria monocytogenes* require control in the final packaged form. Reduced oxygen packaging includes:

1. Vacuum packaging, in which air is removed from a package of food and the package is hermetically sealed so that a vacuum remains inside the package;
2. Modified atmosphere packaging, in which the atmosphere of a package of food is modified so that its composition is different from air but the atmosphere, may change over time due to the permeability of the packaging material or the respiration of the food. Modified atmosphere packaging includes reduction in the proportion of oxygen, total replacement of oxygen, or an increase in the proportion of other gases such as carbon dioxide or nitrogen;
3. Controlled atmosphere packaging, in which the atmosphere of a package of food is modified so that until the package is opened, its composition is different from air, and continuous control of that atmosphere is maintained, such as by using oxygen scavengers or a combination of total replacement oxygen, nonrespiring food, and impermeable packaging material;
4. Cook chill packaging, in which cooked food is hot filled into impermeable bags that have the air expelled and are then sealed or crimped closed. The bagged food is rapidly chilled and refrigerated at temperatures that inhibit the growth of psychrotrophic pathogens; or
5. Sous vide packaging, in which raw or partially cooked food is placed in a hermetically sealed, impermeable bag, cooked in the bag, rapidly chilled, and refrigerated at temperatures that inhibit the growth of psychrotrophic pathogens.

For the chart below: ONLY applies to TCS food (if it's not TCS food it's not a ROP risk/hazard)
VP= Vacuum Packaged, Modified Air Packaged and Controlled Atmosphere Packaged,
CC= Cook Chill
SV= Sous Vide
RA= Regulatory Authority (Health Department)

Vacuum Package (Without Variance)	**CC-SV** (Without Variance)	**VP-CC-SV**
≤41°F/30days	41°F/7days or 34°F/30days	41°F/48 hr max
+2nd Barrier pH ≤4.6, or a_w ≤ 0.91, or Raw, or Cured (USDA), or Cheese (Commercially pkgd)	**1 Barrier Process** **MUST USE A DATA LOGGER** Visually check it 2x/day	
1. HACCP Plan to RA before implementation a. SOPs b. Training **2.** Label **3.** Hold ≤30 days (Except time frozen or the original mfr exp date) **4**. Fish if Frozen	1. HACCP Plan to RA before implementation **2.** Fully cooked **3.** Bagged >135°F **4.** Cooled as per 800, and a. Cooled to 34°F in 48h with 30 d shelf life, b. Held at 41°F ≤7d, or c. Held frozen 5. Labeled w/ food & date 6. Maintain records for 6 months	**HACCP Plan not required if:** 1. Labeled with production a. Time b. Date 2. < 41°F 3. Removed from pkg within 48 hours

NOTE: Fish may not be packaged using a Reduced Oxygen Method *except* for fish that is frozen before, during and after packaging.

If your ROP process is NOT on this chart you may need to apply for a Variance.

12-VAC 5-421-3630 (8-201.14) Contents of a HACCP Plan.

For a FOOD ESTABLISHMENT that is required under § 8-201.13 to have a HACCP PLAN, the plan and specifications shall indicate:

(A) A categorization of the types of TIME/TEMPERATURE CONTROL FOR SAFETY FOODS that are specified in the menu such as soups and sauces, salads, and bulk, solid FOODS such as MEAT roasts, or of other FOODS that are specified by the REGULATORY AUTHORITY; Pf

(B) A flow diagram by specific FOOD or category type identifying CRITICAL CONTROL POINTS and providing information on the following: (1) Ingredients, materials, and EQUIPMENT used in the preparation of that FOOD, Pf and

(2) Formulations or recipes that delineate methods and procedural control measures that address the FOOD safety concerns involved; Pf

(C) FOOD EMPLOYEE and supervisory training plan that addresses the FOOD safety issues of concern; Pf

(D) A statement of standard operating procedures for the plan under consideration including clearly identifying:

(1) Each CRITICAL CONTROL POINT, Pf

(2) The CRITICAL LIMITS for each CRITICAL CONTROL POINT, Pf

(3) The method and frequency for monitoring and controlling each CRITICAL CONTROL POINT by the FOOD EMPLOYEE designated by the PERSON IN CHARGE, Pf

(4) The method and frequency for the PERSON IN CHARGE to routinely verify that the FOOD EMPLOYEE is following standard operating procedures and monitoring CRITICAL CONTROL POINTS, Pf

(5) Action to be taken by the PERSON IN CHARGE if the CRITICAL LIMITS for each CRITICAL CONTROL POINT are not met, Pf and

(6) Records to be maintained by the PERSON IN CHARGE to demonstrate that the HACCP PLAN is properly operated and managed; Pf and

(E) Additional scientific data or other information, as required by the REGULATORY AUTHORITY, supporting the determination that FOOD safety is not compromised by the proposal. P

Additionally, you must:

(F) Identify the food to be packaged;

(G) Describe how the package will be prominently labeled on the principal display panel in bold type on a contrasting background, with instructions to:

a. Keep the food $\leq$ 41°F, and
b. Serve or discard the food within 30 days of packaging.

(H) Include operational procedures that:

a. Prohibit bare hand contact with ready-to-eat food,
b. Identify a designated work area
   (i)Physical barriers/separation of raw foods and ready-to-eat foods,
   (ii)Accessible only to trained personnel familiar with the potential hazards of the operation, and
C. Delineate cleaning and sanitizing procedures for food-contact surfaces

(I) Describe the training program that ensures that employees responsible for the ROP operation understand the:

a. Concepts required for a safe operation,
b. Equipment and facilities, and
c. Procedures specified in (B), (D), and (H) above.

(J) Operate all other aspects of the food establishment in compliance with the VA Food Regulations.