

Checklist for Reduced Oxygen Packaging HACCP Plan Requirements

Reduced Oxygen Packaging (ROP) is when food is packaged by removing oxygen or modifying the packaging atmosphere. This can include processes like cook-chill, modified atmosphere packaging (MAP), controlled atmosphere packaging, vacuum packaging or sous vide. All facilities wishing to use these special processes must have an approved HACCP Plan to control for *Clostridium botulinum* and *Listeria monocytogenes*. Definitions of these processes can be found in Section 010.690 of the Regulations of the Washoe County District Board of Health Governing Food Establishments.

In addition to the required information on the General HACCP Plan Checklist, all proposed HACCP Plans must include the information listed below for the respective process to be considered for approval. A separate HACCP Plan must be completed for each special process and food product.

Attach additional documentation and/or information listed below as required depending on the specific special food process. More information about ROP process requirements can be found in [Section 050.340](#) of the Regulations of the Washoe County District Board of Health Governing Food Establishments.

A. ROP with one barrier - (Where temperature control refrigeration is the only barrier)

- Application for waiver submitted to the Washoe County Health District
- Processing Authority confirmation that the process adequately controls for *C. botulinum* and *L. monocytogenes*. [See Food Process Validation Resources List](#)

B. ROP with two barriers

1. First barrier **must** be temperature control refrigeration

- Procedures to maintain food at or below 41°F
- Procedures for labeling finished product packages and instructions to discard. Shelf-life must not exceed 30 days from packaging (except the time the product is maintained frozen), or the original manufacture's "use-by date" or "sell-by" date, whichever occurs first.

2. Second barrier may be **one** of the following:

- a. Processing Authority confirmation that the final product a_w is 0.91 or less. [See Food Process Validation Resources List](#)
- b. Initial third-party verification of (e.g. laboratory test results) or Processing Authority confirmation that the final product pH is 4.6 or below - [See Food Process Validation Resources List](#)
 - 1) Must include SOP on subsequent on-site routine monitoring to verify pH is 4.6 or below
- c. Is a meat or poultry product cured at a food processing establishment regulated by the USDA using substances specified in 9 CFR 424.21, "Use of food ingredients and sources of radiation", and is received in an intact package
- d. The food product has high levels of competing organisms (e.g. raw meats, and poultry, or raw vegetables)



C. Cook Chill or Sous Vide Cooking as Outlined in [Section 050.340 \(D\)](#)

- Statement that the packaged/bagged product is prepared and consumed on the premises, or prepared and consumed off the premises but within the same satellite business entity and **not** distributed to another business entity or the consumer
- Describe procedures for sealing product before cooking (Sous Vide) or immediately after cooking and before reaching a temperature below 135°F (Cook-chill)
- Describe procedures for cooking to heat all parts of the food to adequate cooking temperatures
- Describe procedures for cooling food in the sealed package or bag from 135°F to 70°F within 2 hours and from 70°F to 41°F within an additional 4 hours
- Describe procedures for maintaining the temperature of the packaged or bagged product using **one** of the following options:
 - 1) Cooled to 34°F within 48 hours of reaching 41°F and held at or below that temperature for no more than 30 days
 - 2) Held at or below 41°F or less for no more than 7 days
 - 3) Held frozen with no shelf-life restrictions while frozen
- Continuous electronic monitoring procedures (including for transport and storage at satellite locations)
- Procedures for labeling finished product packages and instructions to discard based on shelf-life option chosen above
- Statement that records to confirm cooking, cooling, cold holding refrigeration time/temperature parameters will be maintained and held for at least 6 months and will be made available to the Health Authority.

D. ROP of Cheese as Outlined in [Section 050.340 \(E\)](#)

- Copy of original package label (must be commercially manufactured cheese)
 - 1) Must document that product meets Standards of Identity in 21 CFR 133.150 Hard Cheese, 21 CFR 133.169 Pasteurized process cheeses or 21 CFR 133.187 Semisoft cheeses
- Procedures to maintain food at or below 41°F
- Procedures for labeling finished product packages and instructions to discard
 - 1) “Use-by” date must not exceed 30 days from packaging or the original manufacturer’s use-by date or sell by date whichever occurs first

E. ROP of Fish as Outlined in [Section 050.340 \(C\)](#)

- Procedures that describe how fish will remain frozen before, during and after packaging
- Describe how the packages will be labeled with instructions to discard
- Thawing procedures