

Flow charts for small-scale produce value-added processing

Webinar 7/30/18

Kali Feiereisel, MPH
Food Safety Specialist
CAFF
kali@caff.org
530-290-1144

Erin DiCaprio, Ph.D.
Assistant Specialist in
Cooperative Extension
UC Davis



Thank You to Our Funders

These resources and the webinar are supported by our partnership with the Western Regional Center to Enhance Food Safety based out of Oregon State University and from a USDA National Institute for Food and Agriculture Food Safety Outreach Grant FSMA-005777.



Western Regional Center to
Enhance Food Safety



United States Department of Agriculture
National Institute of Food and Agriculture

Introduction

- Many small processors are entering local markets with niche-processing of local foods
- Financial and regulatory burden are large for these very small businesses
- These resources will help farmers understand the multiple state and federal regulatory requirements for selling processed food products in California.





More audience poll questions

Flow charts for On-Farm Value-Added Food Processing

1. Flow Chart 1: Value-Added On-Farm Processing: Regulatory Overview
 - Includes all applicable federal and state regulations
 - Recorded webinar found here:
<https://www.youtube.com/watch?v=n2vllDtQpV4&feature=youtu.be> and here:
2. Timeline 1: California Processed Food Registration
 - Includes timeline for filings, costs, organic program requirements, farmers' market requirements, FDA registration
3. Timeline 2: California Cannery License Program
 - Includes timeline for filings, costs, organic program requirements, farmers' market requirements, FDA registration

Important note on value-added processing

- We recognize that there are many different types of value-added processing that occurs with raw agricultural products
 - Cheese making
 - Meat curing
- These timelines encompass processing of distinct food categories often popular for value-added operations
 - Example processing covered in these resources: jams/jellies, baked goods, dried fruits/nuts, acidified pickles, salsas, canned fruits, and canned vegetables

These resources only provide information on some types value added products

Flow Chart Overview: Risk, Regulations, Cost

Low-Risk Foods

- Honey
- Nut mixes
- Popcorn
- Fruit-based jams and jellies
- Dried or dehydrated whole vegetables and fruits

FOOD SAFETY RISK (examples)

Medium Risk

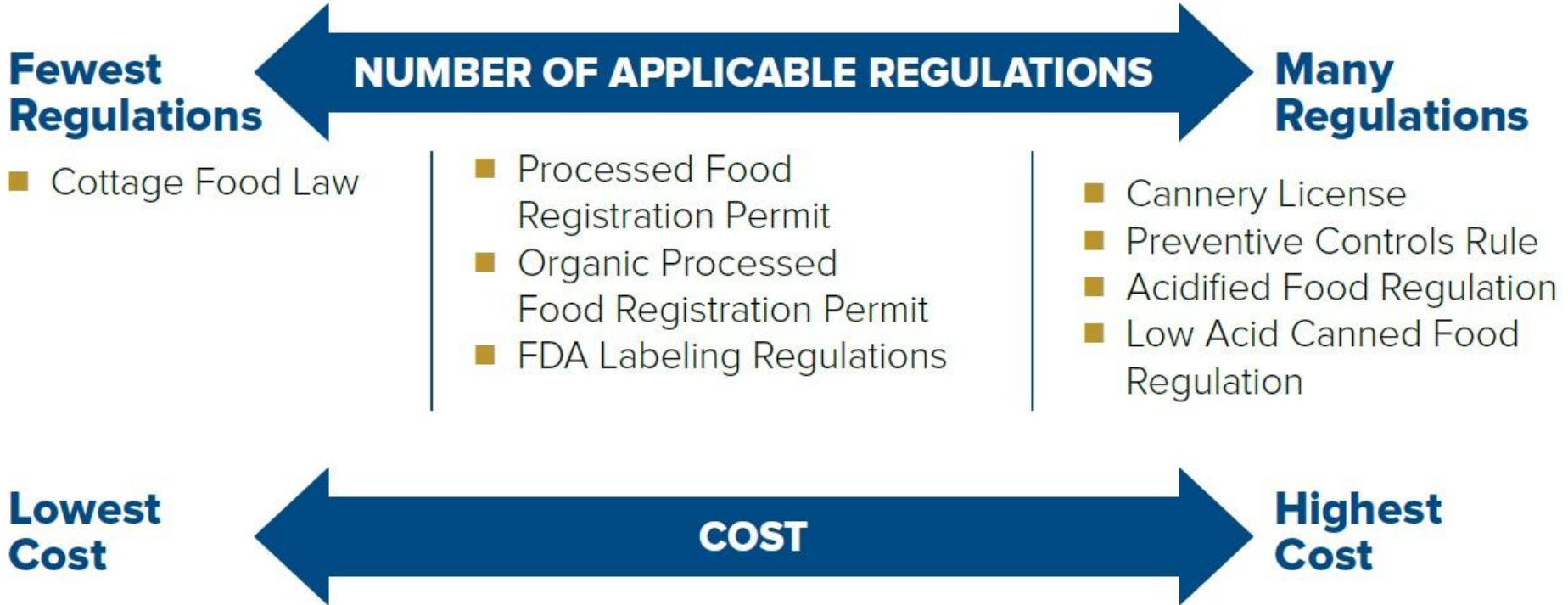
- Oils
- Canned tomatoes
- Canned fruits
- Traditionally fermented foods
- Some types of refrigerated foods

Highest-Risk Foods

- Canned salsa
- Hot sauces
- Vinegar pickled vegetables
- Canned vegetables
- Relishes
- Low-acid refrigerated foods

These are not exhaustive lists. Note that the fruit based jams and jellies must be made in accordance with Cottage Food Operations requirements, which means using higher sugar in the recipes than most people use.

Flow Chart Overview: Risk, Regulations, Cost

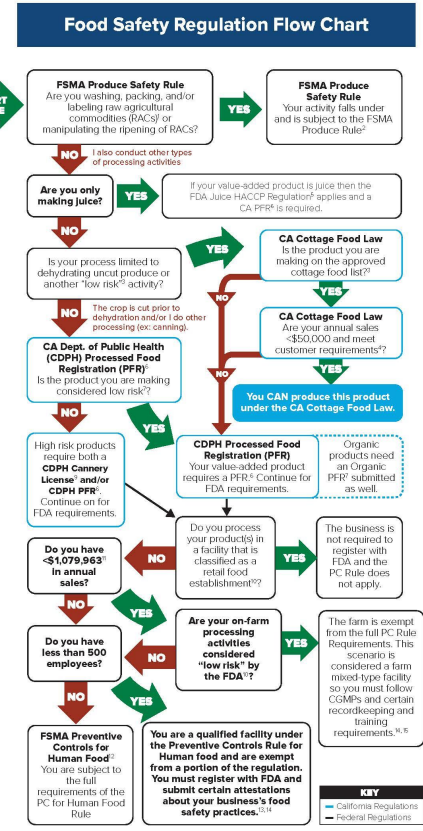


Flowchart One: Federal and State Regulatory Overview

This resource integrates the new federal Food Safety Modernization Act (FSMA) regulations along with CA specific state level regulations.

Relevant regulations include:

- California Cottage Food Law
- California Processed Food Registration
- California Cannery License Program
- US Food and Drug Administration Food Safety Modernization Act
- US Food and Drug Administration Low Acid Canned Food Regulation
- US Food and Drug Administration Acidified Food Regulation



See footnotes on inside back cover

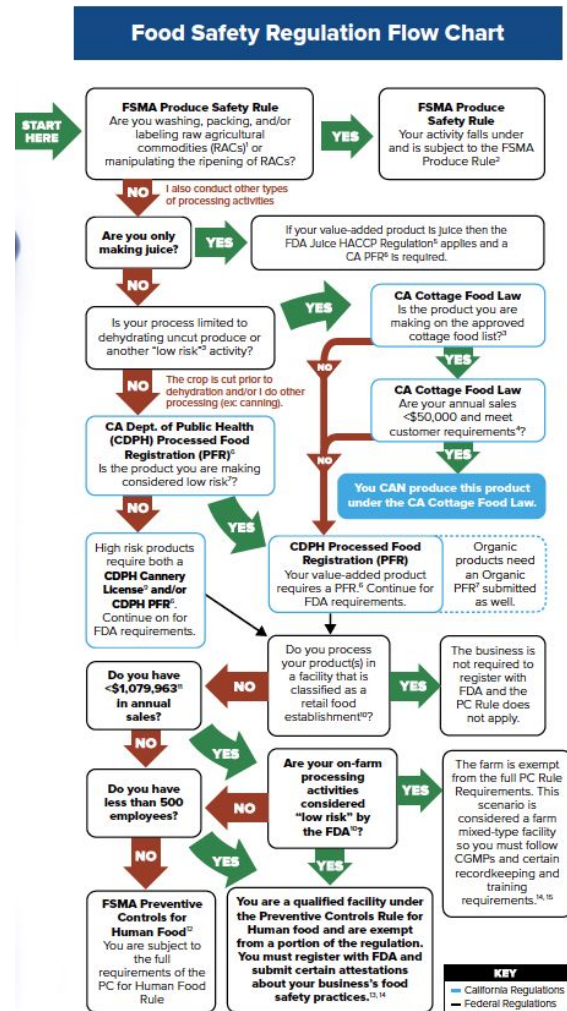
Regulatory Overview Flow Chart

Important considerations:

- Does your product require compliance with any federal regulations?
- Does your product require compliance with any CA state regulations?

Find the answer to those questions by putting your product through the flowchart.

Based on your responses you may determine that your product needs a CA Processed Food Registration Permit.



Timeline 1: Processed Food Registration (PFR)

- This new resource provides an overview and visual representation of the time and steps needed to bring a canned shelf stable product from an idea to market
- Find resource at: <https://www.caff.org/value-added-products/>
- UC Food Safety: <http://ucfoodsafety.ucdavis.edu/>

Processed Food Registration PERMIT TIMELINE



Businesses manufacturing, processing, and/or storing food in California are required to have a valid Processed Food Registration (PFR) permit before engaging in those activities.



Processed Food Registration:

- Businesses manufacturing, processing, and/or storing food in California are required to have a valid Processed Food Registration permit before engaging in those activities
- Foods on the Cottage Food Law list can be produced under a PFR (if the business exceeds the sales limits for a CFO)
- Foods not on the Cottage Food Law list require at a minimum a PFR for production
- Farm business processing excess crops into hot sauce needs a PFR since hot sauce is NOT on the CA Cottage Food Law list of approved products.

Products that likely require a PFR

These are presented as examples and exemptions exist depending on product formulation:

- Baked Goods
- Snack Foods
- Noodles
- Oils (safflower, olive, sunflower)
- Canned fruits
- Canned tomatoes
- Jams/Jellies
 - Fruit based
 - Non-traditional bases if water activity below 0.85
- Refrigerated foods
- Traditionally fermented foods
 - Kimchi
 - Sauerkraut
 - Fermented pickles

Processed Food Registration PERMIT



FAQs

Introduction to PFR Timeline

Businesses manufacturing, processing, and/or storing food in California are required to have a valid Processed Food Registration (PFR) permit before engaging in those activities. Fermenting vegetables is an example of a processing activity that requires the business making the fermented vegetables to obtain a PFR. Other examples of processing activities that require a PFR are listed in this document. Obtaining a PFR takes time. Please reference the timeline below to get a sense of the steps and time needed to obtain a PFR.

Products that likely require a PFR

These are presented as examples and exemptions exist depending on product formulation:

- Baked Goods
- Snack Foods
- Noodles
- Oils (safflower, olive, sunflower)
- Canned fruits
- Canned tomatoes
- Jams/Jellies
 - Fruit based
 - Non-traditional bases if water activity below 0.85
- Refrigerated foods
 - Traditionally fermented foods
 - Kimchi
 - Sauerkraut
 - Fermented pickles

How much does the PFR facility inspection cost?

The first inspection cost is included in the initial PFR permit payment amount. If the facility doesn't pass the first inspection it will have to go through a re-inspection which usually takes 5 hours of the inspectors time at \$100/hr.

How do I schedule a readiness facility inspection?

Once you submit your PFR form and payment the Food and Drug Branch will process it and then contact you to schedule an inspection. If you haven't been contacted within two weeks after you submitted your form and payment we suggest calling the FDB and inquiring about the status of your inspection scheduling.

Who should I talk to at CDPH about PFR questions?

Call the Food and Drug Branch's main phone number at 800-495-3232 and then press 7 to be connected to "food," which sends you to Melissa Mansfield's number. She can answer PFR questions.

See the California Department of Public Health's full PFR FAQs list at <https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20Document%20Library/FDB/FoodSafetyProgram/PFR/FAQs.pdf>.

Access the Federal Food labeling requirements at <https://www.fda.gov/downloads/food/guidanceregulation/ucm265446.pdf> and a CDPH food labeling guide at <https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20Document%20Library/FDB/FoodSafetyProgram/21CFRPart101.pdf>.

Processed Food Registration Timeline



* If you pass the PFR inspection you will receive a verbal "ok" to start production of product. However, you will not be able to sell it in locations that require a PFR written certificate and completion number (e.g. getting a Temporary Food Facility Permit to sell at the Farmer's Market)

Additional organic requirements

Regulatory Step

Business Step

+PC Rule supplement

- PCQI training
- Hazard analysis and food safety plan

DAY 1

- 1) Send in PFR App. Form
- 2) Food Safety Fee form (or exemption)
- 3) Get food handlers certificate: Manager Level

DAY 45

Contact CDPH and ask about status PFR App. (If you haven't heard anything)

DAY 60

Schedule pre-production inspection of facility

Book the kitchen to rent it out for production needs

DAY 65

Schedule kitchen rental times to make product

Find kitchen/production space for product

Determine potential buyers

- 1) Send in organic PFR
- 2) Update Organic System Plan (OSP) to include processing of product
- 3) Confirm with certifying body (e.g. CCOF, Oregon Tilth) if you have to change from a growers cert. to a handlers cert.

Make label mock up

If you need a handlers cert. schedule a site inspection with your organic certifier

DAY 65

Schedule kitchen rental times to make product

DAY 90

- 1) Facility inspection*
- 2) If selling at Farmer's Market, submit Temporary Food Facility (TFF) Permit

DAY 120

- 1) Receive written approval to produce in the facility (PFR)
- 2) Receive written approval from county for TFF

Order jars, supplies

Production!

Sell product

If you need a handlers cert. schedule a site inspection with your organic certifier

DAY 90-110

Make any corrections needed and schedule a re-inspection

DAY 110

Have another in-person facility inspection to verify

- Additional organic requirements
- Regulatory Step
- Business Step

+PC Rule supplement

- PCQI training
- Hazard analysis and food safety plan



Questions?

Jewels of the Forest - PFR Story



SHROOM SNACK

Premium Mushroom Jerky

[Buy Now](#)

***FREE SHIPPING
on Orders over \$35!**





Redshed Farm - PFR Story

Some like it more than hot: Red Shed Farm launches new hot sauce line packed with local flavor

Laura Petersen
Special to The Union
October 31, 2017



Note: the bottles have labels, they just were not photographed with them so more of the product was visible



Photo by Gold Country Photography |

Nevada City Farmers Market Manager Stephanie Stevens launched her new business last Saturday, Red Shed Farm, and nearly sold out on the first day. Red...

Stephanie Stevens was eating spicy food before she was using a fork, according to her family story.

"I love peppers. I always say that they have a lot of personality for a plant. They've got attitude, as if they know they're hot," she said.

Stevens is the owner and brains behind Red Shed Farm, a new line of hot sauce she launched last Saturday at Nevada City Farmers Market.

She's also the Market Manager of the downtown open-air market. Her new business combines her two food loves, spicy and locally grown.

Red Shed Farm offers two hot sauces, Roasted Red Jalapeno and Roasted Green Jalapeno. Ripened longer on the plant, the red is spicier as it's richer in capsaicin, the spicy chemical found in the pits and ribs of chili peppers. The green sauce is more mellow, tangy and crisp.

< PREV | 1 of 4 images | NEXT >

LEARN MORE

<http://www.redshedfarming.com>

<https://www.facebook.com/redshedfarm/>

CA Cannery License

- Low-acid foods aka those with a high pH naturally
- Acidified foods - e.g. dilly beans, salsa w/vinegar

Products likely to require a Cannery License in California

Low-acid canned foods

- Canned vegetables
- Canned soups
- Canned stocks

Acidified canned foods

- Canned tomato sauces with added vegetables
- Canned salsa
- Vinegar vegetable pickles (not fermented*)
- Hot sauces (not fermented*)
- Pickled eggs
- Relishes

This is not an exhaustive list and products may fall under different categories depending on the product formulation. The products listed here are given as general examples. All products need to be evaluated on a case-by-case basis by the CA Process authority.

*Only items that are traditional fermented products to which no acid (vinegar, lemon juice, etc.) is added in the recipe are exempt from the CA pH Control Program

CALIFORNIA Cannery License Program



Low-acid and acidified canned foods must be produced under highly controlled conditions to ensure safety. Low-acid canned products are composed of ingredients that have a naturally high pH (above pH 4.6). Acidified canned products are composed mainly of ingredients that have a moderately high natural pH to which an acid ingredient (e.g. vinegar, lemon juice) is added to bring the final equilibrium pH of the food to 4.6 or below. Improperly processed low-acid and acidified canned foods can lead to severe health consequences, including death, in individuals that consume them. This is due to the growth of the bacteria *Clostridium botulinum* in these improperly processed products. As this bacteria grows in food it produces a potent neurotoxin that can be lethal to humans and animals. To reduce the public health risk, federal and state regulations are in place to control the production of these types of foods.

Low-acid canned products must be thermally processed to inactivate spores of the bacteria *Clostridium botulinum* using a pressure canner or retort. Acidified canned products have an acid ingredient (e.g. vinegar, lemon juice) added to the product to bring the final equilibrium pH of the food to 4.6 or below. The pH of 4.6 or below will inhibit the germination of *Clostridium botulinum* spores and mild thermal processing (boiling water canning, pasteurizing) will eliminate other microorganisms of public health concern in these products. Both the thermal process and acidification process must be produced under the California Department of Public Health's Food and Drug Branch (CDPH-FDB) Cannery Inspection program. All products and processes must be evaluated by the University of California Laboratory for Research in Food Preservation (Process Authority in CA) for being adequate to control *Clostridium botulinum* risk prior to initial production. A CDPH-FDB Cannery Inspector must inspect each lot/batch of product after it is produced, but before it is released on the market for sale.

Cannery License Program Timeline

The timeline below provides an overview of the steps involved and approximate time required to obtain a Cannery License.

Note: Only continue on this timeline if Cannery license is required (based off of UC Lab results: S-letter)



¹You only need to submit payment for Cannery License if you haven't already paid for PFR (for that same business).

²If you are storing the product somewhere other than where you're making the product then you'll need two inspections one for the kitchen (Cannery) and one for the storage area (PFR).

³If you pass the PFR inspection you will receive a verbal "ok" to start production of product. You will not be able to sell it in locations that require a PFR written certificate and completion number until you have those from the CDPH-FDB (e.g. getting a Temporary Food Facility Permit to sell at the Farmer's Market).

Products likely to require a Cannery License in California

Low-acid canned foods

- Canned vegetables
- Canned soups
- Canned stocks

Acidified canned foods

- Canned tomato sauces with added vegetables
- Canned salsa
- Vinegar vegetable pickles (not fermented*)
- Hot sauces (not fermented*)
- Pickled eggs
- Relishes

This is not an exhaustive list and products may fall under different categories depending on the product formulation. The products listed here are given as general examples. All products need to be evaluated on a case-by-case basis by the CA Process authority.

*Only items that are traditional fermented products to which no acid (vinegar, lemon juice, etc.) is added in the recipe are exempt from the CA pH Control Program

FAQs

How much will all of the regulatory fees cost?

It is difficult to predict the total cost of the Cannery license due to the fact that in-person inspections are required and the amount of time required for that is unknown. According to the CA Cannery Law text, (article three on Proration of Costs,) a process is in place for the state department to determine quarterly the costs of inspection fees and to prorate the cost to all cannery license holders.

Where do I go to get help on establishing the process for my product (for example a heat penetration study)?

You can find a list of consultants to help with this type of work here: http://ucfoodsafety.ucdavis.edu/Food_Industry_Contacts/Consultants/. A list of food processing authorities can be found here: <http://www.afdo.org/foodprocessing>

Where can I learn more about food safety best practices for value added canning?

The UC Davis Food Safety webpage on Food Processing has lots of resources available.

What are the repercussions if we do not have a valid cannery license and we produced products?

According to the CA Cannery Law text, violators are subject to conviction of a misdemeanor, which involves a fine of \$50-\$1,000 or imprisonment in the county jail for up to six months.

Learn more about the CDPH's Cannery Program online at <https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/CanneryInspectionProgram.aspx>.

Resources

This resource focuses on the regulations required when processing raw agricultural products into value added products such as salsa and jam. To learn more about food safety regulations for raw produce on farms visit these resources:

The California Department of Food and Agriculture

Small Farm Food Safety Guidelines:

https://www.cdffa.ca.gov/is/i_&c/sffsg.html

UC Davis Food Safety web pages:

<http://ucfoodsafety.ucdavis.edu/>

Community Alliance with Family Farmers web pages:

<https://www.caff.org/programs/foodsafety/>

Additional Resources

- Cottage Food Operations:
<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/CottageFoodOperations.aspx>
- Processed Food Registration Permit:
<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/ProcessedFoodRegistration.aspx>
- Cannery License:
<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/CanneryInspectionProgram.aspx>



Questions?

Flow charts for small-scale produce value-added processing

Webinar 7/30/18

Kali Feiereisel, MPH
Food Safety Specialist
CAFF
kali@caff.org
530-290-1144

Erin DiCaprio, Ph.D.
Assistant Specialist in
Cooperative Extension
UC Davis
eldicaprio@ucdavis.edu
530-752-6594

