



Guide for Organic Processors

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CHAPTER 1

INTRODUCTION

This publication is intended primarily as a guide for farmers who wish to add value to their organic crops through processing. It does not include the farm practices that are required to grow organic crops, raise organic livestock, or obtain organic certification for a farm. Information on those topics can be found in other ATTRA publications, which are listed in the Resources section.

Organic processing requires knowledge of the Federal, State, and local regulations that apply to processing and labeling foods. The specifics of food-processing regulations will not be covered here because the regulations can vary depending on the State and county jurisdictions. This guide will explain the regulations that are relevant to farmers who wish to process their organic crops and label or sell the product as organic. It will answer many questions relevant to all processors and handlers of organic commodities:

- What are the benefits of organic processing?
- How do I get certified as an organic processor?
- What ingredients are allowed in organic foods?
- How do I prepare for my organic inspection?
- Where can I find more information?

Due to their complexity, the specific regulations for the sale of organic dairy products and the slaughter and sale of organic meat are not covered in this publication. If you raise organic livestock for meat, the animals must be slaughtered at a certified organic facility. If you process dairy products into butter, yogurt, cheese, or other products, you will need to be certified as an organic handler.

Who should read this publication?

- Organic farmers who want to begin processing their crops
- Processors of conventional foods who would like to begin processing organic foods
- Distributors (handlers) of organic products
- Extension educators

It may help you to read this guide before you complete an application for organic certification. Note that this is not a required document; it is only a helpful tool.

Value-added processing

Value often is added to fruits or vegetables by transforming them into processed food items. Farmers may choose to sell directly to customers through farmers markets, specialty stores, or a Web site, rather than selling to a distributor.

Value-added foods include a diverse range of products:

- Jams, jellies, and preserves
- Pickles and preserved vegetables

- Salsas
- Breads, cookies, and muffins
- Cheeses

Organic handled or processed products

The purpose of organic certification is to ensure the integrity of organic products in the marketplace. In the United States, there are two categories of organic certification: producers and handlers. Farmers who grow organic crops, raise livestock, or harvest wild crops are certified as producers. If farmers market their raw goods directly to consumers, restaurants, or retail stores, an organic producer certificate is sufficient. If products are processed on the farm, the farmers must obtain an organic handler certificate. Livestock producers typically do not market their meat or dairy products directly to consumers. Slaughtering animals and pasteurizing milk are considered handling activities and require an organic handler's certificate. The sale of fresh eggs can be covered by the producer's certificate.

An organic handling certificate also is required for processing or packaging agricultural products. Processing includes cooking, baking, curing, heating, canning, drying, mixing, grinding, churning, separating, extracting, slaughtering, cutting, fermenting, distilling, preserving, dehydrating, and freezing. Any of these value-added activities fit into the handling category of organic certification. Processing also includes the repackaging of foods from bulk bins into smaller containers labeled for retail sale.

Handling includes many types of activities:

- Roasting coffee
- Combining corn, soybeans, and alfalfa to make chicken feed
- Grinding whole corn into cornmeal
- Fermenting milk to make yogurt
- Fermenting grapes to make wine
- Pressing fresh apples to make cider
- Repackaging bulk coffee into retail bags
- Cutting a large wheel of cheese and repackaging the cheese into smaller packages
- Baking cookies in a deli and labeling them "organic"
- Any of the value-added foods listed above

How to use this publication

To be certified organic by a U.S. Department of Agriculture (USDA)-accredited certifying agent, operations must be managed in accordance with the Code of Federal Regulations in Title 7, Part 205: National Organic Program. Where the USDA organic seal appears, the text quotes from these Federal regulations. The verbatim text follows the reference number detailing where the regulatory text can be found: for example, § 205.203. (The symbol § refers to a numerical section of the USDA Organic Regulations.) The verbatim text is followed by an explanation of the regulation.



This icon indicates resources that are available on the Internet.



This icon precedes the questions at the end of each chapter. The questions serve as a checklist to help you evaluate whether your products are eligible for organic certification and identify areas where your practices may need to be changed.

Consider each of the questions carefully and place a check in the appropriate box. Answers that accurately reflect your current circumstances will be the most helpful to you. If most of your checks are in the Yes boxes, your operation is more likely to be in compliance with the USDA Organic Regulations. Negative answers may indicate a need to modify your production practices or change the formulation of your product to qualify for organic status.



Notes

CHAPTER 2

CONSIDERATIONS FOR ORGANIC PROCESSING

Many farmers have discovered that processing their farm produce has greatly benefited their bottom line. As you consider starting an on-farm processing venture, it's helpful to get a clear picture both of the benefits you'll receive and the challenges you may face. There are many things to consider when you add a new enterprise such as on-farm processing. As you read through the benefits and challenges below, think about which ones will have the greatest impact on your operation and weigh the options to determine what makes sense for you.

On-farm processing

Benefits

- Extra produce that cannot be marketed fresh can be preserved and sold at a later time. For example, peaches, berries, and cherries can be dried or frozen.
- Produce that is slightly blemished can be processed. For example, apples that are too small to sell can be made into cider or apple pie.
- Farm work can be spread throughout the year. For example, frozen berries can be processed into jam during the winter months.
- Seasonal farm workers can be employed during off-season periods.
- Additional family members may be employed in processing activities.
- If the processed product has a long shelf life, marketing can be spread throughout the year. This may affect your summer marketing, reducing the number of farmers markets that you need to attend.
- Value-added products sold off-season will provide income throughout the year.
- Value-added products typically command higher prices than raw agricultural products.

Challenges

- Creating a new product requires in-depth knowledge of Federal, State, and local food-safety regulations. Learning these regulations will take time.
- Creating a new product requires time to research labeling and trade-name requirements, develop formulations, source ingredients, and obtain applicable licenses.
- Creating a new product requires capital. Equipment, ingredients, and facilities may result in significant expenses before the product can be produced for sale.
- You will need new marketing strategies. Possible markets may include grocery stores, specialty stores, and Internet sales, in addition to winter farmers markets.
- A manager will need to oversee the processing operation, particularly during the busy summer months.
- Processing raises liability concerns. You may need insurance.

Organic certification

Benefits

- Organic sales have shown steady growth in recent years.
- A product labeled organic may command a higher price in the marketplace.

Challenges

- Organic certification is required if the product is to be sold or labeled as organic.
- Organic handler certification involves time to complete paperwork.
- Organic handler certification fees will add an additional expense.

Conclusion

Although there are many potential benefits to be had from on-farm processing, getting started can be a challenge. It requires time, labor, and expense, as well as organizational skills to cover the many details involved. Despite the challenges, many farmers have been successful in bringing organic value-added products to market.

As a first step, you may want to consider marketing processed products without any organic claims. This allows you time to develop your product formulations, establish your processing facility, and familiarize yourself with processing regulations before delving into organic certification. You will need to consult with local and State authorities to make sure that you comply with all food-safety regulations.



Questions

- | | | | |
|--|------------------------------|-----------------------------|------------------------------|
| • Have you identified benefits you expect to receive from starting a processing venture? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| • Have you considered the benefits of labeling your product “organic?” | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| • Have you developed an idea for a value-added product? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| • Are you willing to accept the additional challenges of organic processing? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |

If the answer to these questions is Yes, you are ready for the next chapter, “Getting started in organic processing.”



Notes

CHAPTER 3

GETTING STARTED IN ORGANIC PROCESSING

Many people become interested in organic processing because they already own and manage an organic farm. If you have not yet obtained organic certification for your farm, ATTRA's other guides can provide helpful information. Just as you need to have your farm established and your crops planted before applying for farm certification, you need to have your processing facility established and your processing methods developed before you apply for handler certification. This will ensure that the inspector will be able to view all aspects of the operation. The lists in this chapter can help you understand the steps involved.



Related ATTRA publications

www.attra.ncat.org

Guide for Organic Crop Producers

Guide for Organic Livestock Producers

Plan for success

One of the most important steps is the business-planning step. As you create a business plan, consider the unique aspects of your farm operation to find ideas for value-added products. Analyze your marketing opportunities and consider where you might market your product. You may want to investigate marketing through specialty food stores and the Internet as well as farmers markets and supermarkets.

The business plan should include a precise formulation, or recipe, for each product and the quantity you plan to produce. A product formulation includes quantity of ingredients, processing aids, and processing methods (mixing, baking, etc.). Record your formulation with enough detail so that other people could follow the recipe.

A well-written business plan will include the extra time and expense that may be incurred to design or renovate a processing facility (certified kitchen) and purchase all the equipment needed for processing.

Throughout the planning process, learn as much as you can. Review the resources at the end of this guide, contact your local Extension office, attend conferences, and talk to other farmers. Funding may be available for market research, business planning, and product development.

Locate a processing facility

If you plan to do the processing yourself, rather than contracting with a co-packer, you will need access to a processing facility. As you begin processing in small batches, there may be a certified commercial kitchen facility in the community that is available for rent, or it may be necessary to build or renovate a kitchen on the farm. If you plan to build your own facility to process foods, think about these questions as you develop your design:

- Does the water supply meet safe-drinking-water standards?
- Is the building well sealed to prevent rodents from entering?
- Is the building designed to prevent insects from entering?
- Is the exterior of the building designed to be unattractive to rodents?
- Are the floors, walls, and ceilings washable?
- Are the work surfaces made of nonporous materials that can be cleaned easily?
- Are restrooms available?
- Are hand-washing facilities available?
- Are separate sinks available to wash equipment?
- Is lighting adequate?

- Are lightbulbs covered to prevent broken glass from falling into food?
- Is there adequate space to freeze or refrigerate items if needed?
- Is the equipment adequate for the processing that will be done?
- Is the kitchen well ventilated to avoid condensation on the ceiling?

Begin processing conventional food

This list highlights the most important steps that must be taken in order to establish a food-processing business. The questions at the end of this chapter cover these steps in more detail.

1. Learn the Federal, State, and local regulations that apply to your type of processing.
2. Develop product formulations.
3. Find a reliable source of ingredients.
4. Find a source for packaging materials (jars, boxes, etc.).
5. Obtain access to a certified kitchen.
6. Obtain a county food-processing license, if needed.
7. Obtain a State food-processing license, if needed.
8. Learn Federal regulations for labeling foods.
9. Design a label. (Do not make organic claims until you are certified.)
10. Begin production.

Obtain organic certification

After your processing business is established, obtaining organic certification will be straightforward with the help of this guide.

1. Read this guide.
2. Apply for organic certification as a handler.
3. Prepare your organic labels for review and approval.
4. Receive your organic certificate from an accredited certifying agent.
5. Start full production and marketing of organic products.



Questions

- | | | | |
|--|------------------------------|-----------------------------|------------------------------|
| • Have you created a business plan? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| • Are you familiar with the Federal regulations that apply to your type of processing? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| • Are you familiar with the requirements for an acceptable food-processing facility? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| • Have you obtained access to a processing facility or commercial kitchen? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| • Are you familiar with the State regulations that apply to your type of processing? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |

- Have you contacted your State department of agriculture to determine whether you need a State processor license? Yes No N/A
- Are you familiar with the county regulations that apply to your type of processing? Yes No N/A
- Have you contacted your county health department to determine whether you need a county processor license? Yes No N/A
- Have you developed your product formulations? Yes No N/A
- Have you written down the procedures to follow to process your food product? Yes No N/A
- Have you applied for any needed food-processing licenses? Yes No N/A
- Are you familiar with the labeling requirements for food products? Yes No N/A
- Have you designed your label? Yes No N/A



Notes

CHAPTER 4

DECIDING WHETHER ORGANIC CERTIFICATION IS REQUIRED

Reasons for handler certification

The purpose of the organic certification program is to maintain the integrity of organic food from farm to table. When the farmer sells raw fruits and vegetables directly to the consumer through farmers markets or community-supported agriculture (CSA), the farm's certification is sufficient to ensure organic integrity. The farm's Organic System Plan (OSP) covers all areas that contribute to or threaten organic integrity. When raw produce is transported, stored, handled, or processed, additional handler certifications may be needed to ensure organic integrity when the food is not on the farm.

When farmers process their goods, they may require organic handling certification. On-farm processing may range from simple activities, such as freezing produce or drying herbs, to complex activities, such as making applesauce or baking bread. Your OSP must demonstrate compliance with all USDA Organic Regulations for all of your organic production and handling activities. Your certifying agent will review everything described in your OSP and everything seen during your on-site inspection.

Certifying agents verify that handlers take the appropriate precautions to prevent contamination of the organic product by prohibited substances as well as to prevent the commingling of conventional and organic products. This concept will become clearer as you read the following descriptions of various types of enterprises.

If you require handler certification, you must obtain it before selling organic processed products. Even when certification is not required, any person who buys and sells organic products must keep accurate records and a complete audit trail to verify organic status.

The following examples require handler certification:

- Bulk coffee is repackaged into retail bags.
- A large wheel of cheese is cut and repackaged into smaller packages.
- Cookies are baked in a deli and labeled "organic."
- A farmer buys produce from other organic farmers and repacks it for sale to CSA members.
- Organic produce grown on the farm is frozen or dried on the farm.
- An organic farmer buys bulk organic produce and repacks it into smaller retail containers.
- A warehouse washes and waxes organic produce.

The following examples do not require handler certification:

- Farm-raised organic produce is stored on the farm for several months.
- Products prepackaged or prewrapped in retail containers are purchased for resale at a farm store.
- The front panel of the product does not make any organic claims.
- A distributor buys, stores, and sells organic produce without removing it from sealed bulk bins.

Final retailers typically are not required to be certified as organic handlers. They may purchase raw organic products in bulk for resale without certification so long as they do not repackage or relabel them.

Seeds

If a farmer raises a seed crop and sends it to a separate facility to be cleaned, the seed-cleaning facility must have handler certification.



Questions

The following questions about food processing will help you decide whether you need to be certified as an organic handler.

- Do you cook, bake, heat, mix, or grind food? Yes No N/A
- Do you cut, dehydrate, freeze, or dry food? Yes No N/A
- Do you distill or extract? Yes No N/A
- Do you preserve, can, or enclose food in a container? Yes No N/A
- Do you churn, separate, or ferment food? Yes No N/A
- Do you slaughter livestock? Yes No N/A
- Do you chop or trim fruits or vegetables? Yes No N/A

If the answer to any of the above questions is yes, proceed to the following question.

- Is the processed product sold, labeled, or represented as organic? Yes No N/A

If the answer is yes, you are processing food and need to be certified as an organic handler.

The following additional questions about storing and repackaging food will help you decide whether you need to be certified.

- Do you mix livestock feed? Yes No N/A
- Do you repackage bulk food into smaller containers? Yes No N/A
- Do you unpack or repack fruits and vegetables? Yes No N/A

If the answer to any of the above questions is yes, you need to be certified as an organic handler.



Notes

CHAPTER 5

USDA ORGANIC REGULATIONS

The National Organic Program (NOP) is part of the USDA Agriculture Marketing Service (AMS). The NOP develops, implements, and administers production, handling, and labeling regulations for organic agricultural products labeled or sold in the United States. The NOP also accredits the certifying agents, both foreign and domestic, who inspect organic production and handling operations and verify that they meet the USDA Organic Regulations.

Most regulations are based on recommendations by the National Organic Standards Board (NOSB), a 15-member panel appointed by the U.S. Secretary of Agriculture. The NOSB includes organic producers (farmers), organic handlers (processors), retailers, environmentalists, scientists, and consumer advocates from across the United States.

The USDA Organic Regulations outline the requirements that handlers and processors must meet in order to sell their products as organic. Organic certification is the process of verifying compliance with these organic regulations. This assessment process is carried out by a third-party certifier—an independent body that is not linked to either the buyer or the seller. Most products to be sold as organic in the United States must be certified by a USDA-accredited certifier, sometimes known as an accredited certifying agent. You can find a list of available certifying agents on the NOP Web site.



Related ATTRA publications
www.attra.ncat.org

Organic Standards for Handling:
Excerpts of the USDA's National Organic Program Regulations

Organic certification

§ 205.100 What has to be certified

Under the USDA Organic Regulations, most operations that produce or handle agricultural products that are intended to be sold, labeled, or represented as organic must be certified. Producers who fraudulently represent their products as organic may be subject to prosecution and fines of up to \$11,000 for each violation.

During the application process, many certifying agents will require farmers to sign an agreement that they will comply with the organic production and handling regulations in Title 7 Code of Federal Regulations (CFR) Part 205 National Organic Program Rule.



Producers who earn less than \$5,000 from organic products annually are not required to apply for organic certification, although they still must comply with all production requirements. The products from such noncertified operations cannot be used as organic ingredients in processed products produced by another operation.

Products produced under the terms of a foreign equivalency agreement do not require certification by a certifying agent. Visit the NOP Web site to learn more about equivalency agreements.

Organic processing

If you already operate an organic farm, you will be familiar with some of the regulations for organic certification. In order to obtain certification as a handler (processor), you will need to become familiar with the regulations that apply specifically to organic processing. Some of the applicable regulations are listed below:

- § 205.270 Organic handling requirements
- § 205.272 Commingling and contact with prohibited substance prevention practice standard

- § 205.300 Use of the term “organic”
- § 205.301 Product composition
- § 205.302 Calculating the percentage of organically produced ingredients
- § 205.303 Packaged products labeled “100 percent organic” or “organic”
- § 205.304 Packaged products labeled “made with organic (specified ingredients or food groups(s))”
- § 205.305 Multi-ingredient packaged products with less than 70 percent organically produced ingredients
- § 205.605 Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s))”
- § 205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as “organic”

The remaining chapters of this guide will help you become familiar with the regulations listed above.

Remember that organic certification is not a substitute for food-processing licenses and permits issued by your State and county.

The NOP Web site

The NOP Web site provides a wealth of information about organic certification:

- Organic regulations – the entire text
- The Program Handbook – a guide for certifying agents and owners of certified operations
- List of certifying agents – help for finding a certifying agent
- The NOP Organic Insider – an electronic newsletter to keep you up to date
- Financial assistance – cost share to reimburse part of the cost of certification
- Training modules – detailed explanations of specific parts of the regulations



Online Resources

NOP Main Page, www.ams.usda.gov/nop

NOP Program Handbook, www.ams.usda.gov/NOPProgramHandbook

List of certifying agents, www.ams.usda.gov/NOPACAs



Questions

- Do you have access to a copy of the requirements for organic processing? This may be in written form or as a link to the NOP Web site. Yes No N/A

CHAPTER 6

PRODUCT COMPOSITION OF ORGANIC PROCESSED FOODS

§ 205.301 Product composition

- (a) Products sold, labeled, or represented as “100 percent organic”
- (b) Products sold, labeled, or represented as “organic”
- (c) Products sold, labeled, or represented as “made with organic (specified ingredients or food group(s))”
- (d) Products with less than 70 percent organically produced ingredients
- (e) Livestock feed



There are five categories of organic processed food as defined by the labels allowed on the package:

- 100 percent organic
- Organic
- Made with organic (ingredients)
- Claims only in the ingredient list
- Livestock feed

For each category, there are specific rules about the quantity of organic ingredients, whether nonorganic ingredients may be used, approved processing aids, and labeling. This chapter will explain the requirements for each category and how to calculate the percentage of organic ingredients in a product. Chapter 7 will explain the labeling requirements for organic products.

Processed organic foods are composed primarily of organic agricultural ingredients. However, some types of processing may require nonorganic or nonagricultural ingredients. Sections § 205.605 and § 205.606 of the USDA Organic Regulations are part of the National List of Allowed and Prohibited Substances, which lists the substances that may be used in processed organic products. Section 205.605 defines which nonorganic substances are allowed in the handling and processing of organic foods. Section 205.606 lists the nonorganic agricultural substances that are allowed in the handling and processing of organic foods in cases where organic agricultural ingredients are not available. Chapters 10 and Chapter 11 explain these regulations in more detail.

§ 205.2 Terms defined

Section 205.2 of the USDA Organic Regulations defines “processing aid” as follows:

- (1) A substance that is added to a food during the processing of such food but is removed in some manner from the food before it is packaged in its finished form;
- (2) A substance that is added to a food during processing, is converted into constituents normally present in the food, and does not significantly increase the amount of the constituents naturally found in the food; and
- (3) A substance that is added to a food for its technical or functional effect in the processing but is present in the finished food at insignificant levels and does not have any technical or functional effect in that food.





100 Percent Organic

§ 205.301 (a) A raw or processed agricultural product sold labeled or represented as “100 percent organic” must contain ... 100 percent organically produced ingredients.

The “100 percent organic” labeling category is the most stringent. All ingredients other than water and salt must be certified organic. Salt may not be labeled organic because it is a naturally occurring mineral (sodium chloride), not an agricultural product. Salt used in organic products must be pure salt, free of any additives that are not organic. Water may not be labeled organic for the same reason: it is not an agricultural product. Any processing aids used in 100 percent organic products also must be certified organic.



Organic

§ 205.301 (b) A raw or processed agricultural product sold, labeled or represented as “organic” must contain ... not less than 95 percent organically produced raw or processed agricultural products. Any remaining product ingredients must be organically produced, unless not commercially available in organic form ...

§ 205.2 Terms defined

Section 205.2 of the USDA Organic Regulations define “commercially available” as follows: “The ability to obtain a production input in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan.”

Products labeled “organic” must contain at least 95 percent organic ingredients, excluding water and salt.

There are additional limitations on the type of nonorganic ingredients that may be used:

- Nonorganic agricultural ingredients must meet all of these criteria:
 - Not commercially available in organic form
 - Listed in § 205.606 (See Chapter 11, “Nonorganic Ingredients”)
 - Not genetically engineered
 - Not irradiated
 - Not produced using sewage sludge
 - Not produced using a volatile synthetic solvent
- Nonagricultural ingredients must be listed in § 205.605 (See Chapter 11, “Nonorganic ingredients”)
- Processing aids must be listed in § 205.605

Certain nonorganic, nonagricultural processing aids are allowed in food labeled “organic” but *not* in food labeled “100 percent organic.” Decaffeinated coffee, for example, typically cannot be labeled “100 percent organic” because nonorganic processing aids are used in the decaffeination process. However, it may be labeled “organic.”

Made with organic ingredients

§ 205.301 (c) Multi-ingredient agricultural product sold, labeled, or represented as “made with organic (specified ingredients or food group(s))” must contain ... at least 70 percent organically produced ingredients...



Products labeled “made with organic (ingredients)” must contain at least 70 percent organic ingredients, excluding water and salt. There are additional limitations on the type of non-organic ingredients that may be used:

- Agricultural ingredients must meet *all* of these criteria:
 - Not genetically engineered
 - Not irradiated
 - Not produced using sewage sludge
- Nonagricultural ingredients must be listed in § 205.605 (See Chapter 10, “Nonagricultural ingredients”)
- Processing aids must be listed in § 205.605

Organic ingredients in the information panel only

This labeling category applies to products that do not make any organic claims on the principal display panel of the product. The ingredients list may describe components as organic (e.g., “organic strawberries”). There are no restrictions on the nonorganic ingredients in these products.

Livestock feed

§ 205.301 (e) (1) A raw or processed livestock feed product sold, labeled, or represented as “100 percent organic” must contain ... not less than 100 percent organically produced raw or processed agricultural product.



Organic livestock feed must include only organic agricultural ingredients. It may include approved feed additives and supplements as listed in § 205.603 Synthetic substances allowed for use in organic livestock production.

A precise calculation of the percentage of organic ingredients is important because it will determine whether the product can be labeled “100 percent organic,” “organic,” or “made with organic ingredients.” In order to calculate the percentage of organic ingredients in your product, you will need to refer to its precise formulation. If you have obtained a food-processing license, you can use the product formulation you have developed. If you have not yet developed a formulation, doing so is well worth the time: you will need this information in order to obtain organic certification. The method for calculating the percentage of organic ingredients differs depending on whether the product is made with only liquids, only solids, or a mix of solid and liquid ingredients.

Ingredients that are either all solid or a mixture of liquids and solids

For a product that includes both solids and liquids, such as muffins made with flour and sugar (solids) and milk (liquid), you will need to change the quantities from a liquid unit of measurement (volume) to a weight. Using the weight of the liquid will enable you to express all ingredients uniformly.



Calculations

§ 205.302 Calculating the percentage of organically produced ingredients

- (a) The percentage of all organically produced ingredients in an agricultural product sold, labeled, or represented as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))" or that include organic ingredients must be calculated by:
- 1) Dividing the total net weight (excluding water and salt) of combined organic ingredients at formulation by the total weight (excluding water and salt) of the finished product.
 - 2) Dividing the fluid volume of all organic ingredients (excluding water and salt) by the fluid volume of the finished product (excluding water and salt) if the product and ingredients are liquid. If the liquid product is identified on the principal display panel or information panel as being reconstituted from concentrates, the calculation should be made on the basis of single-strength concentrations of the ingredients and finished product.
 - 3) For products containing organically produced ingredients in both solid and liquid form, dividing the combined weight of the solid ingredients and the weight of the liquid ingredients (excluding water and salt) by the total weight (excluding water and salt) of the finished product.
- (b) The percentage of all organically produced ingredients in an agricultural product must be rounded down to the nearest whole number.

Using the table on page 17, follow these steps to calculate the percentage of organic ingredients in food products:

1. Write the name of each ingredient, solid and liquid, in Column One.
2. List the weight of each solid ingredient, except salt, in Column Two.
3. List the weight (not the volume) of each liquid ingredient, except water, in Column Two.
4. Add the weights of all ingredients listed in Column Two. This is the total weight of all ingredients.
5. In Column Three, note yes for each organic ingredient.
6. In Column Four, list the weight of each organic ingredient. This will be the same as the weights listed in Column Two.
7. Add the weights of all organic ingredients listed in Column Four. This is the weight of organic ingredients or the organic weight.
8. Divide the organic weight by the total weight. This is the ratio of organic weight to total weight.
9. Multiply the ratio from Step 8 by 100 to obtain the percentage of organic ingredients.
10. Round the percentage down to the nearest whole number.

Calculating the percentage of solid and mixed liquid and solid organic ingredients

Fill in the table below with the weights of all ingredients. Be sure to use the same units of measurement for each ingredient. The metric system—grams and kilograms—may be easiest to calculate.

One	Two	Three	Four
Ingredient name	Weight of each ingredient	Organic? (yes/no)	Weight of organic ingredients
	Sum=		Sum=
	Total weight		Organic weight

Ingredients that are all liquids

Using the table on page 18, follow these steps to calculate organic ingredients in liquid food products:

1. Write the name of each ingredient in Column One.
2. List the volume of each ingredient, except water, in Column Two.
3. Add the volumes of all ingredients. This is the total volume of all ingredients.
4. In Column Three, note yes for each organic ingredient.
5. In Column Four, list the volume of each organic ingredient. This will be the same as the volumes listed in Column Two.
6. Add the volumes of all organic ingredients. This is the organic volume.
7. Divide the organic volume by the total volume. This is the ratio of organic volume to total volume.
8. Multiply the ratio from Step 7 by 100 to obtain the percentage of organic ingredients.
9. Round the percentage down to the nearest whole number.

Calculating the percentage of liquid organic ingredients

Fill in the table below with the volume of all ingredients. Be sure to use the same units of measurement for each ingredient.

One	Two	Three	Four
Ingredient name	Volume of each ingredient	Organic? (yes/no)	Volume of organic ingredients
	Sum=		Sum=
	Total Volume		Organic Volume



Questions

- Have you developed a product formulation that lists each ingredient and its quantity? Yes No N/A
- Do you understand the requirements for the labeling category that you intend to use for your product? Yes No N/A
- Have you calculated the percentage of organic ingredients in your product? Yes No N/A



Notes

CHAPTER 7

LABELING ORGANIC FOODS

After determining the labeling category for your organic product, it's time to create a label that entices customers to buy and complies with the USDA Organic Regulations. This chapter will help you understand the regulations as they apply to organic product labels. Every label for every organic product must be approved by your certifying agent before it is attached to the product. Any time you add a new product to your organic line, that new label must be approved. The certifying agent's expertise will ensure that the label meets the requirements.

The labels on a packaged product must meet certain criteria:

- Must display certain required items
- May display certain optional items
- Must not display certain prohibited claims

These requirements are detailed in § 205.303 to § 205.307. This chapter explains the labeling requirements that pertain to foods making organic claims on the label. Note that other Federal labeling regulations will have additional requirements that pertain to all foods, both organic and conventional. This chapter will not explain those regulations because they are beyond the scope of the USDA Organic Regulations.



- § 205.303 Packaged products labeled "100 percent organic" or "organic"
- § 205.304 Packaged products labeled "made with organic (specified ingredients or food group(s))"
- § 205.305 Multi-ingredient packaged products with less than 70 percent organically produced ingredients
- § 205.306 Labeling of livestock feed
- § 205.307 Labeling of nonretail containers used for only shipping or storage of raw or processed agricultural products labeled as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))"

The sample label below shows the principal display panel on the left and the information panel on the right.

Label Anatomy



- Organic Designation
- Product Name
- NOP Seal
- Additional Label Claims
- Nutritional Facts
- Ingredient Statement
- Allergen Warnings
- Name of Distributor
- Name of Certifying Agent
- Certifying Agent's Seal



Source: USDA National Organic Program



§ 205.2 Terms defined

Principal display panel. That part of a label that is most likely to be displayed, presented, shown, or examined under customary conditions of display for sale.

Information panel. That part of the label of a packaged product that is immediately contiguous to and to the right of the principal display panel as observed by an individual facing the principal display panel, unless another section of the label is designated as the information panel because of package size or other package attributes (e.g., irregular shape with one usable surface).

100 percent organic

Labels that state “100 percent organic” also *must* display the statement “certified organic by” with the name of the certifying agent. For all processed products, the name of the certifying agent of the product’s final handler must appear on the product label. The statement “certified organic by” must be placed on the information panel below the name of the final handler of the product. If you send your products to be processed by a co-packer rather than processing them yourself, the certifying agent listed on the label must be the agent who certified the final processor of the product. (A contract packer, or co-packer, is a company that manufactures and packages foods or other products for their clients.)

Products labeled “100 percent organic” may display these optional items:

- The term “100 percent organic”
- Each organic ingredient identified as organic
- The USDA organic seal
- The seal of the certifying agent

If the words “100 percent organic” are used on the principal display panel, the font size of the text must be no more than one-half of the size of the largest letters on the panel.

If the USDA organic seal is used, it must be printed in one of two ways:

- Entirely in black and white
- In green and white with a brown outer circle.



The USDA organic seal

The shades of green and brown are specified, and other colors are not allowed. Both versions of the seal may be downloaded from the National Organic Program (NOP) Web site. The seal or logo of the certification agent must not be displayed more prominently than the USDA seal.

Organic

Requirements for labeling foods “organic” are similar to those for labeling foods “100 percent organic.”

Labels must display these items:

- Each organic ingredient identified as organic
- The statement “certified organic by” with the name of the certifying agent

Labels may display seals of the USDA and the certifying agent as well as these optional items:

- The term “organic”
- The percentage of organic ingredients (on the front panel)

Made with organic _____

Labels that state “made with organic _____” must display these required items:

- Each organic ingredient identified as organic
- The statement “certified organic by” with the name of the certifying agent

Labels must not display the following:

- The USDA seal

Labels may display the following:

- The statement “made with organic (specified ingredients)” or “made with organic (food groups)”
- The percentage of organic ingredients in the product
- The seal of the certifying agent of the handler of the finished product

There are some restrictions on the term “made with organic.” Only three organic items may be listed. The items may be either individual ingredients or food groups. Ingredients include whole foods, such as tomatoes, corn, or cheese. The food groups that may be listed are beans, fish, fruits, grains, herbs, meats, nuts, oils, poultry, seeds, spices, sweeteners, vegetables, and processed milk products. If food groups are listed, all ingredients in that food group must be organic. The font size of the letters must be no more than one-half of the size of the largest type on the panel.

The above regulations are correct as of April 2012. However, the USDA is expected to issue further guidance regarding the labeling of organic products. Always check the NOP Web site or consult your certifying agent to obtain the most current regulations and guidance documents.

Organic ingredients in the information panel only

Products that make no organic claims on the principal display panel may list organic ingredients in the information panel. These products may be produced and sold without organic handler certification. There are no mandatory requirements for information that must be displayed.

Labels must not display these prohibited items:

- The USDA organic seal
- The seal or logo of an organic certifying agent

Labels may display these optional items in the ingredient panel only:

- Each organic ingredient identified as organic
- The percentage of organic ingredients in the product

Livestock feed

Labels for livestock feed must display the following:

- The name of the certifying agent

Labels may display these optional items:

- The USDA organic seal
- The seal of the certifying agent
- The term “100 percent organic” or “organic” as appropriate
- Each organic ingredient identified as organic

Nonretail containers

Nonretail containers, such as apple bins, are the containers used to store or transport organic products. If a co-packer processes your product, the crop will be shipped from the farm to the co-packer in a nonretail container. The container *must* display a lot number that can be traced back to the farm in order to maintain identity of the organic product.

The container may display the following:

- Identification of the product as organic
- Name and contact information of the certifying agent
- Handling instructions to maintain organic integrity of the product
- The USDA seal
- The seal of the certifying agent

Shipping containers used to carry organic products for export may be labeled in accordance with requirements of the foreign country if they are clearly marked “For export only.”

Conclusion

This section described the most important items to consider when designing labels for your organic products. Certifying agents often are willing to review the labels as you design them. They will approve the final design when it meets all organic regulations. It’s best to obtain certifier approval before printing a large number of labels. If labels are printed before they are reviewed by the certifying agent, it is possible that they may not be approved, and you will not be allowed to use unapproved labels for your products.



Questions

- Have you read the section of the USDA Organic Regulations that applies to the labeling category? — (“100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s))”? Yes No N/A
- Does your label include the name of the final handler? Yes No N/A
- If you display the USDA organic seal, have you verified that you are using the correct colors? Yes No N/A
- If you must ship raw organic product to a co-packer, is each container labeled with a lot code that allows the product to be traced to its source? Yes No N/A

100 percent organic

- If your product is “100 percent organic,” is each ingredient in the ingredient statement identified as organic? Yes No N/A
- If your product is “100 percent organic,” does the label contain the statement “certified organic by” along with the certifying agent’s name? Yes No N/A

Organic

- If your product is “organic,” is each organic ingredient in the ingredient statement identified as organic? Yes No N/A
- If your product is “organic,” does the label contain the statement “certified organic by” along with the certifying agent’s name? Yes No N/A

Made with organic ...

- If your product is “made with organic _____,” is each organic ingredient in the ingredient statement identified as organic? Yes No N/A
- If your product is “made with organic _____,” does the label contain the statement “certified organic by” along with the certifying agent’s name? Yes No N/A

No organic claims

- If your product does not make organic claims on the front label, have you avoided displaying the USDA Organic seal? Yes No N/A
- If your product does not make organic claims on the front label, have you avoided displaying the seal or logo of any certifying agent? Yes No N/A

Livestock feed

- If you are handling livestock feed, does the label contain the name of the certifying agent? Yes No N/A



Notes

CHAPTER 8

THE CERTIFICATION PROCESS

Once you understand the USDA Organic regulations and your facility is set up to handle organic product, you're ready to begin the certification process. Be sure to contact the certifying agent a few months before you plan to process organic foods and ask how long it will take to get certified. This will ensure that you have your organic certificate when you need it. If you need a certificate quickly, some certifying agents will expedite your application for an additional fee.

The process of getting certified involves coordination between the certifying agent, the organic operator, and the inspector. In applying for certification, the operator agrees to understand and comply with the regulations, be available for inspection, allow the certifying agent access to the processing facility and its records, and answer all of the certifying agent's questions. The certifying agent reads the application, assigns an inspector, reviews the inspection report, and makes the certification decision.

Five steps to organic certification

Step 1. The operator submits an application to a certifying agent

You can apply for handler certification to any certifying agent who is accredited by the USDA National Organic Program (NOP). A list of all accredited certification agents (ACAs) can be found on the NOP Web site listed at the end of this chapter.

An application for organic handler certification typically consists of the following documents:

- Application form
- Organic System Plan for Handlers
- Product profiles
- Operator agreement or affirmation
- Report of organic sales

The Organic System Plan (OSP) for Handlers may be called the Organic Handling System Plan, the Handling Organic System Plan, or the Organic Handling Plan, depending on the terminology used by your certifying agent. Just as the OSP for Producers describes your farm operation, the OSP for Handlers describes your processing operation. The product profile lists all ingredients used in each product. Chapter 9 will provide more detail about how to prepare your OSP and product profiles.

The person who signs the operator agreement agrees to adhere to the regulations and affirms that the information supplied to the certifying agent is correct. This agreement should be signed by the person who has responsibility for making decisions about the operation—typically the owner or a high-level manager.

Many certifying agents will request that applicants report their annual sales of organic product. New applicants will be asked to estimate their projected organic sales. Ordinarily, the sales are reported in the calendar year during which the sales revenue is realized.

Certifying agents will request that you pay their fees before they begin reviewing your application materials. Be sure to inquire about the fee structure because it varies among certifiers.

Step 2. The certifying agent reviews the application materials

The certifying agent will read the Handling OSP and determine whether the practices are described in sufficient detail to fully describe your operation. If a product will be labeled

“organic” or “100 percent organic,” the certifying agent will review all ingredients and processing aids to verify that they meet the requirements of § 205.301, Product Composition. If the OSP is complete, and if the practices appear to comply with organic standards, the certifying agent will assign an inspector to visit your facility.

Step 3. The inspector visits the processing facility

Every processing facility must be inspected annually. The organic inspector represents the certifying agent and must:

- Verify that the OSP accurately describes the operation
- Verify that the owner and employees are following the OSP
- Look for any violations of the USDA Organic Regulations

During the inspection, you must allow the inspector complete access to your operation, including all production facilities and storage areas. The inspector will ask questions about your operation and review the following documents:

- Application documents sent to the certifying agent
- Records of production processes
- Invoices for purchased ingredients
- Organic certificates from ingredient suppliers
- Records of sales of organic products
- Current product formulations

Organic inspectors maintain strict confidentiality. Information you provide about product formulations, sources of ingredients, sales, or any other practices will not be shared with anyone except the certifying agent or the USDA. Confidential business information is protected under a Freedom of Information Act exemption, so neither your certifying agent nor the USDA will intentionally compromise this information.

The inspector can explain the organic regulations but is not allowed to provide advice on how to overcome barriers to certification. This separation between the farmer and the certifying agent maintains the “independent third party” nature of the transaction. Similarly, inspectors are not allowed to accept gifts because it may compromise their independent status.

At the conclusion of the inspection, there will be an exit interview during which the inspector will review any areas of concern. After the inspection, the inspector will write a report and send it to the certification agency.

Step 4. The certifying agent reviews the inspection report

The certifying agent reviews the inspection report, along with the initial application, and decides whether your operation meets the USDA Organic Regulations. The reviewer will pay particular attention to any issues mentioned in the exit interview and will decide the seriousness of those issues. If your handling operation complies with the regulations, you’ll receive an organic certificate. Often, your first inspection will identify some issues that need to be addressed. In this case, certification will be delayed until these problems are corrected. Your inspector will make you aware of these issues during your exit interview. Your certifying agent will send you a letter detailing these issues, which is titled a Notice of Noncompliance. The formal title is a requirement of the USDA Organic Regulations. Your particular issues may be easily corrected, and once you resolve them, you can receive organic certification. More serious issues may require additional modifications to bring your operation into compliance with the USDA Organic Regulations.

New applicants may receive several types of letters from their certifying agents:

- If the operation is in compliance with the regulations, the certifying agent issues an organic certificate.
- If the operation needs to provide additional information or correct minor practices, the certifying agent issues a certificate with conditions. There will be a deadline by which the applicant must respond to these conditions, which is usually no more than 30 days.
- If there is something that threatens the organic integrity of the product that can be corrected, the certifying agent issues a Notice of Noncompliance.
- If there are major noncompliance issues that cannot be corrected, the certifying agent issues a Notice of Denial of Certification to new applicants, along with the Notice of Noncompliance.
- If there are major noncompliance issues during the certification-renewal process, the certifying agent issues a Notice of Noncompliance. This notice may be either followed by or sent at the same time as a Notice of Proposed Suspension or Notice of Proposed Revocation. The producer or handler is provided an opportunity to appeal or request mediation; otherwise, the organic certification is suspended or revoked through a Notice of Suspension or Revocation.

If you receive a letter and do not understand any technical language it may contain, call your certifying agent for clarification. You also can call ATTRA for advice on how to resolve an issue and bring your operation into compliance. The ATTRA hotline is 800-346-9140. The Spanish-language ATTRA hotline is 800-411-3222.

Step 5. The certifying agent issues the organic certificate

Congratulations! You're certified!

Annual renewal of certification

Every organic operation is required to renew its certification each year. Certification may be suspended if it is not renewed. You also may voluntarily surrender your certificate if you do not want to remain certified.

The renewal process comprises the following steps:

- Update the OSP
- Address all noncompliance issues that have not been resolved
- Pay the annual certification fees
- Have an annual inspection

Many certifying agents also will require you to sign an operator agreement or affirmation stating that the information you supplied is correct.

Once certification is granted, it remains in effect until it is surrendered voluntarily, suspended, or revoked.



Online Resources

ATTRA, www.attra.ncat.org

National Organic Program, www.ams.usda.gov/nop

New Farm Guide to U.S. Organic Certifiers, www.rodaleinstitute.org/certifier_directory



Certification fees

Certification fees may vary significantly among certifying agents. You may request a written fee estimate from a certifying agent at any time. Most certifying agents charge a one-time fee to new applicants to cover administrative and review costs. Annual renewal fees, which sometimes are based on the sales of organic products, are assessed each year. Some certifying agents include the inspection costs up front; others will charge additional fees after the inspection to cover its cost.

The NOP administers a cost-share program for certified organic operators. The program reimburses farmers and handlers for a percentage of their certification fees. As of this writing, each individual certificate (Producer – Crops, Producer – Wild Crops, Producer – Livestock, and Handler) is eligible for reimbursement of up to 75 percent of the certification fees. The application process is simple. Information on how to apply is available from your certifying agent, your State department of agriculture, the NOP, or ATTRA.



Questions

- Do you have a processing facility that is fully equipped to process your organic product? Yes No N/A
- Have you decided which certifying agent to apply to? Have you contacted the certifying agent to determine how long the certification process will take? Yes No N/A
- Have you obtained all the forms that are part of the application? Yes No N/A



Notes

CHAPTER 9

THE ORGANIC SYSTEM PLAN FOR HANDLERS



§ 205.201 Organic production and handling system plan

(a) The producer or handler of a production or handling operation ... must develop an organic production or handling system plan that is agreed to by the producer or handler and an accredited certifying agent ... An organic production or handling system plan must include:

- (1) A description of practices and procedures to be performed ...;
- (2) A list of each substance to be used as a production or handling input ...;
- (3) A description of the monitoring practices and procedures to be performed ...;
- (4) A description of the recordkeeping system ...;
- (5) A description of the management practices and physical barriers established ...; and
- (6) Additional information deemed necessary by the certifying agent to evaluate compliance with the regulations.

Under the USDA Organic Regulations, each certified operation must have an Organic System Plan (OSP) as part of the application materials sent to the certifying agent. The OSP must be written by a representative of the organic producer or handler and approved by the certifying agent. If you have a farm and are certified as a producer, your OSP will cover only the planting, growing, harvesting, and possibly the storage of your crops. If you want to handle or process crops, you'll need to complete a separate OSP for Handlers that describes your processing activities, such as the following:

- Type of handling
- Ingredient purchases
- Transportation of raw ingredients
- Storage
- Cleaning and sanitation
- Processing
- Pest management
- Sales
- Recordkeeping

All activities must be explained in sufficient detail to allow the certifying agent to get a clear picture of your operation and assess whether you can meet the requirements for organic certification.

This chapter explains the type of information that may be requested by your certifying agent. It is only a guide to typical questions. Since handling operations are diverse, not all questions apply to all operations. The certifying agent may request additional information to better evaluate whether your operation complies with the regulations.

Flowchart

A flowchart shows the movement of organic products from the time they are received at the facility to the time they are sold as finished products. Many flowcharts are diagrams, but they can be simply a list of steps to be followed in processing. Flowcharts must indicate each processing step and each step where ingredients or processing aids are added. A

separate flowchart must be submitted for each type of product. For example, if you are drying herbs and use the same equipment to dry mint, basil, and lavender flowers, you would probably need only one flowchart. If you are producing tomato salsa and strawberry jam, on the other hand, you would need to prepare a separate flowchart for each because they are different types of products.

Facility map

The map or diagram of the processing facility should be sufficiently detailed so that the inspector can see where the processing equipment is located. If your operation includes boilers, freezers, slicers, ovens, or other equipment, they should be included on the facility map. Any areas where organic ingredients or finished products are stored should be indicated on the facility map as well.

Individual product profiles

A product profile must be submitted for each individual product that you process. The product profile lists all ingredients and processing aids and the suppliers from which you obtained them. If you have developed a product formulation, as mentioned in Chapter 3, you will already have most of the information at your fingertips. The quantity of each ingredient must be listed to allow your certifying agent to verify that the percentage of organically produced ingredients is consistent with the statement on your product label. In other words, if you intend to label your product “organic,” the certifying agent will calculate the percentage of organic ingredients to verify that it is 95 percent or higher.

If water or salt are used, they must be listed on the product profile. They are not counted when calculating the percentage of organic ingredients. Water used as an ingredient must meet the standards set by the Safe Drinking Water Act (SDWA).

A sample product profile is included at the end of this chapter to get you started. Check to see if your certifying agent has preferred product profile forms. It’s always advisable to use your certifying agent’s forms.

Supplier certificates

If you purchase organic ingredients, you will need to obtain current organic certificates from each supplier to verify that the ingredient is indeed organic. When you purchase the ingredient, keep the invoice and verify that the item is marked “organic” on the invoice. If you purchase an item, such as organic sugar, from the grocery store, save the label and the receipt.

Since operations are provided new organic certificates each year when they successfully complete a renewal, you should plan to obtain the most current certificates on a regular basis and keep them on file so they can be viewed by the inspector. The current certificates verify that the suppliers have maintained their organic certification.

Sample labels

You will need to send a label from each organic product to your certifying agent for review. It’s best to create a full color mockup of the label and send it to the certifying agent for approval before ordering printed labels. If the USDA organic seal will be on your label, the certifying agent will want to verify that it is printed only in the allowed green and brown colors, or in black and white.

Sanitation

Because they present a possible risk of contamination to organic foods, any materials used on food-contact surfaces must be listed in your OSP. Cleansers are used to remove dirt,

oils, or other materials from both storage containers and processing equipment. Nearly all cleansers are allowed because they typically are rinsed off without leaving any residue.

Sanitizers fall into a different category. They are distinguished from cleansers because they are used on clean surfaces to kill microorganisms that may contaminate food and often aren't rinsed. Chapter 10, "Nonagricultural ingredients," explains what types of sanitizers are allowed and how to determine whether the specific product you want to use is allowed for organic processing.

Washing produce

Produce may be washed in water after it is harvested if the water meets the standards set by the SDWA. Your certifying agent may require an annual water test to verify that no harmful microorganisms are present in the water supply.

If you add any substances to the wash water, such as anti-foaming agents, anti-microbial agents, or microbes for disease prevention, they must be listed on the OSP. Waxes or other substances applied to produce after it is washed must be listed in the OSP as well.

Recordkeeping system

A complete recordkeeping system includes all the documents required to track the flow of organic product through your system. Records begin with purchase or harvest of raw ingredients on your farm, continue through storage and processing, and end with sale of the final product. Records for organic production must be clearly differentiated from records for conventional production.

Processors must keep invoices, purchase orders, storage records, processing records, and similar items. Chapter 12, "The Audit Trail," has more details on the types of documents that will be needed.

Split operations

If you store, handle, or process any conventional products in addition to your organic products, you have a split operation. Your OSP and your certification includes only the management of organic products. However, the certifying agent probably will ask whether you handle conventional products. You will need to explain how you will prevent the conventional items from being commingled (mixed together) with the organic items.

If the same ingredients are used both for organic and conventional products, you will need to present a plan for keeping the items separate. For instance, a bakery that purchases organic flour to bake organic bread and conventional flour to make conventional cupcakes would need to demonstrate a plan for identifying and separating the two types of flour. Although the final products differ, the use of an ingredient in both organic and conventional form increases the risk of commingling. On the other hand, if there are few similarities between your conventional and organic products, such as organic dried apples and conventional tomato salsa, there may be little danger of commingling. Your certifying agent still will need your plan for keeping the materials and products separate.

Parallel operations

An operation that processes the same product in both organic and conventional form often is called a parallel operation. Processors that produce both conventional and organic frozen vegetables, roasted coffee, or canned tomato sauce would be parallel operations. In parallel production, the OSP must include a plan to prevent commingling of organic and conventional ingredients and final products. Good recordkeeping is essential for maintaining an audit trail for parallel products, which may be visually identical.

Annual renewal of certification

A new application, along with an updated OSP, must be submitted to the certifying agent each year. The OSP must be updated whenever a new product is added or the operation moves to a new facility. Typically, a new product can be added to your organic certificate at any time if you contact the certifying agent and send the relevant paperwork. Even if you plan to change only a product formulation or a label, you should notify the certifying agent of your plans in order to ensure that your OSP is current.



Questions

- Have you obtained a copy of the Organic System Plan for Handlers forms from your certifying agent? Yes No N/A
- Have you obtained a copy of the Product Profile Forms from your certifying agent? Yes No N/A
- Have you prepared a flowchart for each product? Yes No N/A
- Have you drawn a map or diagram of your facility? Yes No N/A
- If you use water to wash produce or as an ingredient, have you verified that your water meets the Safe Drinking Water Act? Yes No N/A
- Have you obtained an organic certificate from each supplier of an organic ingredient? Yes No N/A
- Have you reviewed your recordkeeping system to verify that organic handling and processing activities are clearly distinguishable from nonorganic activities? Yes No N/A



Notes

Organic Individual Product Profile Form

Business name
Product Name

Product category (circle one):

“100 percent organic”

“Organic”

“Made with organic (...)”

Formulation					
Ingredient	Supplier	Certification agent of supplier	Organic? Yes / No	Weight	Percent of finished product
Weight of organic ingredients					
Total weight of all ingredients					
Percent of organic ingredients					

Processing aids		
Processing aid	Supplier	Application and use

CHAPTER 10

NONAGRICULTURAL INGREDIENTS

§ 205.605 Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s)).”

The following nonagricultural substances may be used as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s))” only in accordance with any restrictions specified in this section.

- (a) Nonsynthetics allowed
- (b) Synthetics allowed



The National List

Sections 205.601 through 205.606 of the Code of Federal Regulations constitute the National List of Allowed and Prohibited Substances for crop production, livestock production, and handling:

- § 205.601 Synthetic substances allowed for use in organic crop production
- § 205.602 Nonsynthetic substances prohibited for use in organic crop production
- § 205.603 Synthetic substances allowed for use in organic livestock production
- § 205.604 Nonsynthetic substances prohibited for use in organic livestock production
- § 205.605 Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))"
- § 205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as "organic"

The National List was created to define explicitly which nonorganic substances would be allowed for use in organic crop production, livestock production, or production of processed foods. Two sections of the National List contain substances prohibited for organic crop and livestock production; two sections contain substances specifically allowed for organic crop and livestock production; and two sections contain substances allowed for processing and handling.

Processed organic foods are composed primarily of agricultural ingredients. Some types of processing require nonagricultural products, such as sodium bicarbonate (baking soda) for a leavening agent or diatomaceous earth for filtering. Since these substances are essential for certain types of processing, the last two sections of the National List address the cases where it is necessary to use a substance that is either nonorganic or nonagricultural (and by definition nonorganic). Section 205.605, discussed in this chapter, lists the nonagricultural substances that are allowed in the handling and processing of organic foods. Section 205.606, discussed in the next chapter, lists the nonorganic agricultural substances that are allowed in the handling and processing of organic foods.

Determining whether a nonagricultural substance is allowed

You may need to use some nonagricultural substances in your food processing, such as sanitizers, filtering aids, or leavening agents. Your certifying agent must approve all

nonagricultural substances before they can be used in your products. One way to determine whether a substance is allowed in organic production is to verify that it is on the National List. If a substance is not organic, it may not be used as an ingredient or processing aid in products labeled “organic” unless it is in § 205.605 or § 205.606 of the National List.

The National List only lists generic substances. There are two organizations that currently publish brand names of products allowed for organic production and handling: the Washington State Department of Agriculture (WSDA) and the Organic Materials Review Institute (OMRI).

Neither WSDA nor OMRI evaluates the product’s effectiveness, nor are their listings an endorsement of the product. Companies are not required to register their products with WSDA or OMRI.

The National List, as well as the WSDA and OMRI lists, are updated on a regular basis. Materials may be added or removed, and new products are evaluated. In addition, anyone may submit a petition to the National Organic Standards Board (NOSB) requesting that a generic substance be added to the National List at any time. The NOSB meets twice annually to review petitions and make formal recommendations to USDA. These recommendations inform rulemaking actions, which may result in occasional changes to the National List. The USDA may not add a substance to the National List without the NOSB’s recommendation.

The NOSB also conducts reviews of each substance on the National List every 5 years. During the review, the NOSB will recommend whether the substance should continue to be allowed or prohibited. This process is commonly referred to as “sunset” review and may result in changes in the allowance of substances already on the National List. In short, it’s important to stay informed about changes to the National List. Your certifying agent always should be able to provide you with the latest information.

Microorganisms

Many types of food processing require the addition of microorganisms. Specific strains of bacteria, yeasts, and other fungi may be added to agricultural products to make beer, wine, yogurt, bread, vinegar, cheese, sauerkraut, soy sauce, and other fermented foods. Other types of microorganisms are applied to freshly harvested produce to reduce the incidence of post-harvest decay. This is most common with crops that will be stored, such as potatoes, apples, pears, and citrus fruit.

Microorganisms are considered nonagricultural, nonsynthetic (or natural) substances. They are listed in § 205.605 (a) “Nonsynthetics allowed,” which means they are allowed for use in organic products if they are food-grade bacteria, fungi, or other microorganisms. Yeasts are listed separately from other microorganisms. They must be nonsynthetic and must not be grown on petrochemical substrates. All yeasts and other microorganisms must not be genetically modified (GMO). Before you purchase a specific strain for use in organic production, obtain written verification from the manufacturer that the strain is non-GMO and include the verification in your Organic System Plan (OSP). Be aware that new GMO strains of microorganisms are continually being developed because the science of molecular biology is a rapidly changing field. You will need to verify the non-GMO status on a regular basis, at least annually, and possibly each time you purchase the microorganism product.

Cleansers and sanitizers

Nearly every handler uses some type of cleanser and some type of sanitizer. Although commonly grouped together, these are different products used for different purposes.

Cleansers

A cleanser is used to remove soil, food particles, or unwanted debris from surfaces. Soaps and detergents are cleansers. Typically, cleansers are fully rinsed from food-contact surfaces; therefore, they never make contact with the food. Phosphoric acid is the only cleanser on the National List. Most other cleansers are allowed for use in organic production and handling; they do not need to be on the National List.

Sanitizers

Sanitizers differ from cleansers in that their purpose is to kill microorganisms, not to remove soil or other debris. Sanitizers are applied after food-contact surfaces are cleaned. Sanitizers also may be applied to fresh produce to kill harmful surface microorganisms or added to wash water for fruits, vegetables, eggs, poultry, and meat products.

Section 205.605 of the National List explicitly mentions these allowed sanitizers:

- Acidified sodium chlorite
- Chlorine materials (including bleach)
- Hydrogen peroxide
- Ozone
- Peracetic acid/Peroxyacetic acid

Specific brand names of approved sanitizers can be found on the OMRI or WSDA lists, although other products also may comply with the USDA Organic Regulations. The lists also mention any particular restrictions or other allowed uses. Some sanitizers leave residues on the equipment. In such cases, depending on the sanitizer you are using, the certifying agent may require you to have a plan to remove residues as well as a way to document that residues have been removed.

Chlorine

Chlorine is one of the most commonly used sanitizers, both for food-contact surfaces and on agricultural products. As listed in § 205.605 (b) “Synthetics allowed,” chlorine materials are allowed for “disinfecting and sanitizing food contact surfaces” in organic processing. The regulation also states that “residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act,” which is currently 4 parts per million (ppm) chlorine. The NOP 5026 guidance document, “The Use of Chlorine Materials in Organic Production and Handling,” clarifies the allowed use of chlorine. The online address for the document is listed in this chapter under “Online resources.”

When washing produce, the rinse water that makes final contact with the organic product must not contain more than 4 ppm chlorine. In other words, a food product, such as apples, may be bathed in water containing a higher concentration of chlorine if doing so is permitted by the U.S. Environmental Protection Agency, but that product must receive a final rinse of water containing no more than 4 ppm chlorine. The procedures used to wash produce and to monitor chlorine levels in the wash water must be included in the OSP.

You must include all cleansers and sanitizers on your OSP, and they must be approved by your certifying agent before you use them. Review § 205.605 to get familiar with the diversity of materials listed. The latest version of the list can be accessed from the NOP Web site under the tab Organic Regulations. The online address is listed in this chapter under “Online resources.”



Online Resources

NOP 5026: The Use of Chlorine Materials in Organic Production and Handling, www.ams.usda.gov/nopprogramhandbook

OMRI Materials Lists, www.omri.org

USDA National Organic Program, www.ams.usda.gov/nop

WSDA Materials Lists, www.agr.wa.gov/FoodAnimal/Organic/MaterialsLists.aspx



Questions

- Have you reviewed the sections of the National List that apply to processors and handlers? Yes No N/A
- Have you listed all the cleansers and sanitizers that you plan to use in your Organic System Plan? Yes No N/A
- Have you verified that any nonagricultural ingredients or processing aids you intend to use are allowed for organic handling? Yes No N/A
- If you will wash produce, have you verified that any materials added to the wash water are allowed for organic handling? Yes No N/A



Notes

CHAPTER 11

AGRICULTURAL INGREDIENTS

§ 205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as “organic.”

Only the following nonorganically produced agricultural products may be used as ingredients in or on processed products labeled as “organic,” only in accordance with any restrictions specified in this section, and only when the product is not commercially available in organic form.



Chapter 10 discussed one section of the National List of Allowed and Prohibited Substances: nonorganic *nonagricultural* substances that are allowed as ingredients in organic products. This chapter discusses the next section of the National List: nonorganic *agricultural* ingredients that are allowed for use in organic products.

As a general rule, all agricultural ingredients in products labeled as “organic” must be organic. Section 205.606 of the National List contains the few exceptions to this rule: the nonorganic agricultural products that are allowed for use in products labeled as “organic.” These nonorganic ingredients are permitted only if the organic form is not commercially available. These nonorganic products may constitute a maximum of 5 percent of the final organic product. Items on the National List are primarily ingredients that would be used in small amounts, such as colors derived from plant sources, herbs, and spices.

Commercial availability

Nonorganic ingredients listed in § 205.606 may be used in “organic” products only if an organic ingredient is not commercially available. Agricultural ingredients in products labeled “made with (specified ingredients or food group(s))” are not subject to this requirement. “Commercially available” is defined under the USDA Organic Regulations as “the ability to obtain a production input in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan (§ 205.2).” In order to demonstrate that a product is not commercially available, you need to search for organic ingredients and document that search, listing the companies you contacted and the date. Ingredients are increasingly available as organic, but it may take some time to find suppliers that offer the form, quality, and quantity you need. According to the USDA Organic Regulations, difference in price is not permitted as a reason to use a nonorganic ingredient instead of the organic one.

Sourcing organic ingredients

There are several approaches to sourcing organic ingredients.

The National Organic Program (NOP) Web site has a searchable database that includes all NOP-certified operations. It can be found by clicking on “List of Certified Operations” under “Organic Certification and Accreditation.” You can search for “berries,” and the program will provide the names and contact information for hundreds of operations that grow organic berries. To search for a source in a particular geographic location, enter the country, State, or city in the applicable fields.

In addition, you can find a full list of certifying agents on the NOP Web site by clicking on “List of Certifying Agents” under “Organic Certification & Accreditation.” The NOP Web site address is www.ams.usda.gov/nop.

Also, some certifying agents have searchable databases listing their clients, which you can access online.

There are many distributors who will search for suppliers of organic ingredients, each of which serves a unique niche. For example, distributors may focus on processed foods, such as juice concentrates or herbs, or on such tropical ingredients as chocolate. Distributors may have a minimum order size, which might exceed the needs of small processors. Depending on the ingredients you’re seeking, it may take some time to locate a supplier and ensure that you have a steady supply of the quality ingredients you need.



Questions

- Have you found organic sources of all the agricultural ingredients in your organic products? Yes No N/A
- If you are not able to locate a source for an organic ingredient, have you checked to see whether the item is listed in § 205.606? Yes No N/A
- If you plan to use a nonorganic agricultural product, have you contacted several sources to verify that it is not available as organic? Yes No N/A
- Has your certifying agent confirmed your assessment of commercial availability? Yes No N/A



Notes

CHAPTER 12

THE AUDIT TRAIL



§ 205.103 Recordkeeping by certified operations

- (a) Certified operators must maintain records concerning the production, harvesting, and handling of organic products...
- (b) Such records must:
 - (1) Be adapted to the particular business that the certified operation is conducting;
 - (2) Fully disclose all activities and transactions ... in sufficient detail as to be readily understood and audited;
 - (3) Be maintained for not less than five years beyond their creation; and
 - (4) Be sufficient to demonstrate compliance with the Act and regulations in this part.
- (c) The certified operations must make such records available for inspection and copying during normal business hours by authorized representatives of ... the certifying agent.

As noted in § 205.103 above, organic farmers and handlers must maintain adequate records to document their organic handling activities. This system of records is called an audit trail. A good audit trail will allow you to track the organic product from the field where it is grown through harvest, storage, handling, processing, shipping, and final sale to the consumer. The inspector will review your documentation during the audit.

If you don't have a good recordkeeping system in place, the audit can be one of the most challenging parts of an organic inspection. If you do maintain adequate records, and you have them readily available for review, the audit portion of the inspection should proceed smoothly.

This chapter explains the types of audits that certifying agents conduct and the types of documents that may be requested during the audits. You may not need all of these records, or you may need additional records. The recordkeeping system must be adapted to the operation.

The types of audits

Your certifying agent's inspector will choose the type of audit to be conducted and the product to be audited. During the audit, the inspector must review your documentation and be able to understand the purpose of each document. A thorough audit will ensure that all the relevant activities of your handling operation are recorded. Handlers who are new to organic certification may find that they need to prepare additional documents, or modify the ones they already are using, in order to keep records that are sufficient for an audit. You won't have organic sales records at your first inspection, before you've sold any organic products, but you may be asked how you intend to record your organic sales.

There are three types of audits:

- Sales/financial audits
- Backtrack or trace-back audits
- Ingredients-in/products-out balance audit (in/out balance)

Financial audits

The financial audit verifies the sales of organic product and the income from the sales over a specific period of time. If you reported annual sales in your application paperwork, an

inspector may review documents from that year to understand how you calculated your annual sales and to verify that the information you reported is correct.

To conduct a financial audit, the inspector will need invoices or other documents that show what you earned from sales of organic product. The quantity of product sold will be compared with the quantity produced, as well as with the income received from sales of the product, to verify that conventional product is not sold as organic. Some certifying agents calculate user fees based on the income from sales of organic products.

Backtrack audits

The backtrack audit, also called a trace-back audit, verifies that your documentation is sufficient to track organic products from the time they enter your possession until the time they leave your facility. To conduct a backtrack audit, the inspector will choose a lot code from a finished product and connect it back through the documents (the audit trail) to find the ingredients, purchased or produced, that were used to make the product.

To prepare for this audit, look at your flowchart, which should diagram the flow of ingredients from the time they enter your facility to the time they leave as finished product. Assemble records related to purchasing raw ingredients, processing, selling finished products, and shipping. Remember to include records related to storing ingredients and finished products.

Ingredients-in/product-out balance audits

The ingredients-in/product-out balance audit verifies that organic ingredients were purchased or produced in sufficient quantity to make the organic products that were sold. To conduct this audit, the inspector will examine purchase orders and weight tickets to verify the quantity of ingredients purchased. Using your batch records and product formulations, the inspector will calculate the quantity of ingredients used in processing. The inspector will then compare the quantity of ingredients purchased with the quantity of finished product produced. The inspector also will review storage records to verify the quantities of ingredients and products in inventory. This is a complex audit, but it is fairly common for split operations and large operations.

Types of audit-trail records

These examples of audit-trail records are given in the order they would typically be generated from the time an ingredient enters the facility to the time it is sold. The organic products on each document should be clearly labeled “organic.”

Receiving

- Purchasing invoices
- Purchase orders
- Weight tickets
- Storage records (ingredients)

Processing

- Production records
- Batch records
- Processing reports
- Storage records (finished products)

Sales

- Sales invoices
- Shipping records
- Bills of lading
- Annual sales totals

Lot numbers

Regardless of the type of audit conducted, the ability to track products through handling and processing is vital. Using lot numbers to track products can ensure a good audit trail. Each ingredient that is received in your facility should be assigned a lot number, which can be as simple as a date and product name. Any time that ingredients are blended, a new lot number must be assigned. For example, if you were making strawberry jam, you would record the lot number of the sugar, pectin, and other ingredients as they are received. When the jam is processed, a new lot number will be assigned to the finished jam. If you use only strawberries grown on your own farm, lot numbers may not be needed for the strawberries. If you purchase some of the strawberries, it will be important to note on the production sheet the source of the berries using a lot number or other tracking system.

Many processors use lot numbers for quality-assurance purposes, both for the incoming ingredients and the finished products. If a production batch does not turn out as expected, evaluate the source of ingredients. Sometimes the problem can be traced to a specific batch of ingredients. Lot numbers can be used to facilitate a recall if there is a complaint or a food-safety issue after a product is manufactured and sold.



Questions

- Can your records be easily understood and audited? Yes No N/A
- Are records maintained to ensure a complete audit trail? Yes No N/A
- Does your recordkeeping system permit accurate tracking of products from receiving through sales? Yes No N/A
- Are the following records easily available?
 - Purchasing invoices Yes No N/A
 - Purchase orders Yes No N/A
 - Weight tickets Yes No N/A
 - Storage records (ingredients) Yes No N/A
 - Production records Yes No N/A
 - Batch records Yes No N/A
 - Processing reports Yes No N/A

- | | | | |
|---------------------------------------|------------------------------|-----------------------------|------------------------------|
| — Storage records (finished products) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Sales invoices | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Shipping records | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Bills of lading | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Annual sales totals | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |



Notes

CHAPTER 13

PREPARING FOR AN ORGANIC INSPECTION

Each organic farm or handling operation must be inspected at least once a year. The purpose of this annual inspection is to verify that the owner and employees are following the organic system plan (OSP) that was submitted to the certifying agent. In order to verify that the protocols are followed, they must be documented as part of the recordkeeping requirements for organic operations. Complete and adequate records are essential for ensuring organic integrity because they demonstrate compliance with organic standards. The certifying agent will notify the inspector if there were any compliance issues noted in the past and will ask the inspector to verify that those issues have been resolved.

An organic inspection may take only an hour for a storage facility, a few hours for a small processing plant, or a full day for a complex operation. The inspector will need enough time to cover several aspects of the operation:

- Visit all parts of the facility, including ingredient storage, processing, and finished-product storage
- Review all the questions on your OSP to verify that they are still correct and ask whether any changes have been made
- Confirm that any previous compliance issues have been resolved
- Conduct an audit

In addition to the annual inspection, which covers all aspects of your operation, you may receive an unannounced inspection. An inspector will visit your facility on short notice, perhaps a few hours or a full day. Typically, an unannounced inspection will be shorter than your annual inspection and will focus on a specific aspect of your operation, such as observing the processing operation or reviewing sales receipts.

Some people start preparing for an inspection after the inspector calls to set a date for the on-site visit. In reality, you are preparing for an inspection every time you purchase organic ingredients, process organic foods, or sell finished products. If you operate every day as if you were preparing for the inspection, completing paperwork and filing it as needed, you'll be well prepared for the annual inspection. Equally important, you will be prepared for any unannounced inspections.

When preparing for the on-site inspection, consider the following:

- **Personnel.** Be sure that anyone involved with organic production, including receiving, production, sales, accounting, and filing, is available. Being available to answer questions and provide documents helps the inspector fulfill the responsibilities of the inspection and facilitates the renewal of certification.
- **Workspace.** If possible, provide space for the inspector to set up a laptop and to review your audit-trail documents.
- **Time.** Allow several hours. The inspector will estimate the time needed, but inspections can require extra time if your recordkeeping system is incomplete or difficult to follow.
- **Audit trail.** Have documents from the current year and the previous year readily available. Documents from earlier years may be requested as well—you are required to keep documents for 5 years.
- **Records.** Have copies of the records listed below.

Before the inspector arrives, let your employees know that it is important to interact with the inspector in a professional manner. Intimidating or harassing an inspector may cause



Related ATTRA publications

www.attra.ncat.org

Preparing for an
Organic Inspection:
Steps and Checklists

the inspection to be terminated, which can compromise your ability to complete the certification process.

Types of records

The inspector will need to look at all records pertaining to organic production. The following lists provide examples of the types of records that will typically be requested related to your facility, ingredients, and processing activities. In addition to these records, the audit-trail records discussed in Chapter 12 should be readily available.

Correspondence

- Application materials sent to your certifying agent
- Organic System Plan for Handlers sent to your certifying agent
- Correspondence from your certifying agent
- Correspondence to your certifying agent that explains corrective actions that were taken to resolve compliance issues
- Facility records
- Facility map
- Pest management logs
- Records of cleaning and equipment sanitation

Ingredient records

- Organic certificates from suppliers of organic ingredients
- Records of tests to confirm that the water you are using is potable

Depending on your label claims and the type of ingredients and processing aids used in your product, you may need the following:

- Verification that nonorganic ingredients are not genetically modified [do not contain genetically modified organisms (GMOs)]
- Documentation of your search for organic ingredients when you are using nonorganic ingredients

Processing records

- Product formulations or recipes
- Production flowchart
- Batch sheets or other records of production
- Sample labels

If the above documents are not available at inspection, you may be required to send them to the certifying agent before receiving your organic certificate. This will slow the renewal process and create more work for you and the certifying agent.



Questions

- Do you retain all records applicable to your operation for at least 5 years? Yes No N/A

• Are the following records easily accessible?

- | | | | |
|--|------------------------------|-----------------------------|------------------------------|
| — Application materials sent to certifying agent | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Organic System Plan for Handlers sent to certifying agent | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Correspondence from your certifying agent | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Correspondence to your certifying agent addressing corrective actions to address any compliance issues | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Facility map | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Pest management logs | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Records of cleaning and equipment sanitation | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Organic certificates from suppliers of organic ingredients | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Records of tests to confirm that the water you are using is potable | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Records that verify ingredients are non-GMO | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Documentation of your search for organic ingredients when you are using nonorganic ingredients | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Product formulations or recipes | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Production flowchart | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Batch sheets or other records of production | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| — Sample labels | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |



Notes

CHAPTER 14

STORAGE AND PEST MANAGEMENT

This chapter covers two different, but related, topics:

- Storing organic ingredients and processed products
- Controlling pests in the buildings where organic products are stored, handled, or processed

Storage

All buildings where organic crops are handled or stored must be listed on your organic system plan (OSP) and included in your facility map. If you store the ingredients or finished products away from your farm or processing facility, either those buildings must be under your control or the owners must have their own organic certification. Retail stores and other operations that have products packaged in sealed retail containers do not need to be inspected or certified because there is no danger of contamination.

Organic ingredients and products should be stored in a separate area away from conventional ingredients. All bins, shelves, and storage areas should be clearly labeled “organic” or “conventional.” If storage rooms include both organic and conventional products, the organic products should be stored in a manner that reduces the possibility of contamination or commingling with conventional products.

One way to prevent commingling is to store organic products on upper shelves and conventional products on lower shelves. This practice can reduce the chances of commingling. For example, if an organic apple fell into a conventional lot, only that one apple would lose its organic status. If a conventional apple fell into an organic lot, however, it might be impossible to determine which apple was organic. This would mean that the whole lot would lose its organic status.

Facility pest management

§ 205.271 Facility pest management practice standard

The facilities where organic products are stored must use management practices to prevent pests.



Section 205.271, which addresses pest control, applies to any buildings where organic product is stored, handled, or processed. Adequate pest management is essential to prevent food from becoming contaminated by insects, rodents, or other pests. Organic handlers follow a multi-level hierarchical approach when dealing with pests in storage facilities. The first level of control, Level A, is prevention of the problem. The second and third levels, Levels B and C, include physical and chemical controls. The fourth level, D, is available for use inside and around the outside perimeter of buildings if the organic products can be protected from contamination.

If you contract with a pest-control company, be sure that the representative who services your facility is familiar with the USDA Organic Regulations. The company should implement measures to prevent pests and understand how to verify whether materials are allowed for pest control.

Level A

Prevention is the first line of defense. Keeping pests out of your facility saves time and money and reduces the need for further pest control. To prevent pests from entering a storage building, use screens on windows, keep doors closed, and make sure doors are well sealed when they are closed.

Make your facility an unfavorable environment for pests. Remove food sources to prevent pest populations from increasing. Examples include sweeping up spilled grains or ensuring that food left in a lunchroom is in sealed containers. Inside your storage rooms, keep bins and boxes at least 12 inches from the walls. Set traps for rodents next to the walls.

The area outside your facility should be kept clean and clear of debris so there are no places for rodents to hide. While they are attractive, shrubs or other plants next to the building also provide shelter for rodents, so you may wish to limit their use. If your processing operation creates food waste, such as corn husks, potato peels, or grape skins, the waste should be removed regularly so it does not attract flies or other insects.

Level B

The second line of defense, Level B, is the use of mechanical and physical controls. Level B practices include insect lights that attract and kill insects and mechanical rodent traps baited with food, such as cheese.

Level C

The third line of defense, Level C, is to be used only after Level A and Level B have been applied. Level C practices include the use of materials on the National List of Allowed and Prohibited Substances, located in § 205.601 of the USDA Organic Regulations. Baits that kill rodents or insects are Level C practices. Examples include Vitamin D3 bait to kill rodents and diatomaceous earth placed in grain bins to kill insects. If you wish to use any pest-control materials, you must include the materials in your Organic System Plan and maintain records of their application in a pest-control log.

Level D

The fourth line of defense, Level D, may be used only if pest-control actions in Levels A, B, and C do not adequately prevent or control facility pests. Level D practices include the use of synthetic insecticides or rodenticides that are not on the National List. These substances are normally prohibited in organic agriculture. They may be used only as a last resort. Your certifying agent must approve the use of prohibited pest-control materials before they are used. Before approving a Level D application, your certifying agent will verify that you have already employed Level A, Level B, and Level C pest-control actions. Your certifying agent will review the substance to be applied, the method of application, and the measures to be taken to prevent contact with organic products.

Applications of pesticides required by law

If Federal, State, or local laws or regulations require use of a prohibited pesticide, notify your certifying agent. Agree on a plan to ensure that measures are taken to prevent contamination of organic products. If your certifying agent has approved the practice, it will not compromise your organic status.



Questions

- Does your OSP for handling include all buildings where raw ingredients or finished products are stored? Yes No N/A
- If you store organic ingredients or products in buildings that are not part of your main operation, are the storage units either certified organic or included in your farm’s inspection and certification? Yes No N/A
- Are storage facilities large enough to segregate organic and conventional products as needed? Yes No N/A
- Where both conventional and organic products are stored, are the storage areas clearly marked and segregated from each other? Yes No N/A
- Is each storage container or shelf clearly labeled “organic” or “conventional?” Yes No N/A
- Are prohibited materials (fuels, pesticides, etc.) stored well away from organic foods?
- If you have contracted a company to manage your pest control, have you notified the company that it must comply with USDA Organic Regulations? Yes No N/A
- Have you taken measures to prevent pests from entering your processing facility? Yes No N/A
- Have you taken measures to discourage pests, including removal of food and shelter? Yes No N/A
- Are all pest-control products allowed for organic use? Yes No N/A
- If you were obliged to use a synthetic pest-control material, did you obtain approval from your certifying agent? Yes No N/A
- If you are using pest-control products, is their use recorded in a pest-control log? Yes No N/A



Notes

CHAPTER 15

RESOURCES

The information presented in this chapter is intended as a helpful reference. It is for information purposes only and inclusion in this list does not constitute endorsement by USDA. It is the user's responsibility to verify the accuracy of any information.

The following resources provide information on organic regulations, the organic-products industry, and food-safety regulations. This list is not intended to be exhaustive. There are many additional resources available, notably in the areas of business management or government programs for small business.

Accredited Certifiers Association, Inc.

www.606organic.com

The Accredited Certifiers Association, Inc., is a nonprofit organization open to certifying agents and others in the organic community. It administers the Web site 606organic, which lists suppliers of organic forms of the agricultural ingredients in § 205.606 of the USDA Organic Regulations. The nonorganic ingredients may be used only when an organic form is not commercially available.

Agricultural Marketing Resource Center (AGMRC)

www.agmrc.org

AGMRC is a national electronic resource for producers interested in value-added agriculture. The site provides information on marketing and business development plus a directory of resources for each State.

ATTRA

www.attra.ncat.org

ATTRA (Appropriate Technology Transfer for Rural Areas) is managed by the National Center for Appropriate Technology. ATTRA, also called the National Sustainable Agriculture Information Service, provides information about sustainable agriculture via toll-free helplines, publications, webinars, and an extensive Web site. The publications can be downloaded from the ATTRA Web site or you can call the ATTRA helpline to request a print copy. ATTRA's English-language helpline number is 800-346-9140; the Spanish-language helpline number is 800-411-3222.

Selected ATTRA publications:

- Adding Value to Farm Products: An Overview
- Guide to Organic Crop Production
- Guide for Organic Livestock Producers
- Organic Standards for Handling (Processing)
- Small-Scale Egg Handling
- Small-Scale Poultry Processing
- Legal Issues for Small-Scale Poultry Processors

eOrganic

www.eorganic.info

eOrganic provides information to the agriculture community in the form of articles, videos, and webinars. The link to *Entrepreneurs & Their Communities* has resources for value-added farm products.

Food and Drug Administration (FDA)

The U.S. Food and Drug Administration oversees various processing activities.

Overview of FDA programs

www.fda.gov/Food/default.htm

Regulations for food-service establishments

www.fda.gov/food/FoodSafety/RetailFoodProtection

Federal requirements for food labeling

www.fda.gov/Food/LabelingNutrition/default.htm

Finding the State agency responsible for issuing food-processing licenses

www.fda.gov/Food/FoodSafety/RetailFoodProtection/FederalStateCooperativePrograms/ucm122814.htm

National Center for Appropriate Technology (NCAT)

www.ncat.org

The National Center for Appropriate Technology is a national nonprofit organization that offers programs in sustainable agriculture, sustainable energy, and community development. One of the sustainable-agriculture programs is ATTRA, listed above.

Natural Food Network

www.naturalfoodnet.com

The Natural Food Network hosts a Web site that provides “business insight for natural and organic buyers.” Its marketplace tab is a searchable database to find ingredients, co-packers, consultants, and other items you may need for your business.

Non-GMO Sourcebook

www.nongmosourcebook.com

The Non-GMO Sourcebook is a buyer’s guide to suppliers of ingredients that do not contain genetically modified organisms (GMOs). Be aware that the publisher of this list does not verify the non-GMO claims of the suppliers. It is the responsibility of the buyer to ask for documented proof of the non-GMO claims.

Organic Materials Review Institute (OMRI)

www.omri.org

The Organic Materials Review Institute provides an independent review of products intended for use in organic agriculture and processing. The OMRI list of allowed products can be found on its Web site.

Organic Processing Magazine

www.organicprocessing.com

Organic Processing Magazine has articles on organic regulations, business planning, industry trends, and profiles of people and companies. Some articles are geared toward large processors, but many are of interest to the entire organic community. The magazine is available for free.

Organic Trade Association (OTA)

www.theorganicpages.com

www.HowToGoOrganic.com

The Organic Trade Association is a business association geared to wholesaling of organic products in North America. It maintains The Organic Pages Online, a database where you can search for suppliers of organic ingredients. It also maintains a Web site that offers information on the transition from conventional to organic farming and processing.

Small Poultry Processing Plants and Services

www.attra.ncat.org/attra-pub/poultry_processors

Small poultry processing plants and services are listed on this database maintained by NCAT.

Sustainable Agriculture Research and Education (SARE)

www.sare.org

SARE promotes research and education to improve profitability and sustainability of farms. SARE's learning center contains books, videos, online courses, and fact sheets. The publications are typically national in scope and provide a thorough review of the subject. SARE also provides grants to farmers, researchers, and extension personnel to conduct on-farm research.

USDA Business and Industry Guaranteed Loans (B&I)

www.rurdev.usda.gov/rbs/busp/b&i_gar.htm

USDA administers the Business and Industry (B&I) Guaranteed Loan Program to help establish, expand, or modernize rural businesses. The B&I Guaranteed Loan Program is a general-purpose economic development program that can be used for a wide range of projects. Loans eligible for a guarantee can range in size up to \$25 million; the percentage of the loan that is guaranteed varies depending upon the size of the loan. The B&I Program requires the participation of an eligible lender.

USDA Cooperative Extension Service

www.csrees.usda.gov/Extension

This Web site provides links to State Cooperative Extension offices. From there, you can find telephone numbers of county offices, local workshops on food-safety regulations, and other resources as provided by your State.

USDA National Organic Program (NOP)

www.ams.usda.gov/nop

The mission of the National Organic Program is to ensure the integrity of USDA organic products in the United States and throughout the world by implementing the Organic Foods Production Act. Its Web site has a link to the electronic Code of Federal Regulations applicable to organic production and handling, a list of accredited certifying agents, a list of all certified organic operations, and a wealth of other information. The Program Handbook, which can be downloaded from the Web site, provides guidance to help operations and certifying agents comply with USDA organic regulations. The NOP also administers a cost-share program, reimbursing eligible operations for as much as 75 percent of their certification costs—up to \$750 per year. You can subscribe to the NOP's electronic updates, the NOP *Organic Insider* and the *Organic Integrity Quarterly*.

Current guidance documents for handling:

- Guidance: The Use of Chlorine Materials in Organic Production and Handling
- Draft Guidance: Handling Bulk, Unpackaged Organic Products

USDA Reimbursement Transportation Cost Payment (RTCP) Program for Geographically Disadvantaged Farmers and Ranchers

www.fsa.usda.gov/Internet/FSA_Notice/sp_53.pdf

RTCP provides assistance to geographically disadvantaged farmers and ranchers. The program reimburses producers for a portion of the transportation cost of their agricultural commodity or transporting inputs used to produce an agricultural commodity during a fiscal year. RTCP is subject to appropriated funding.

USDA Value Added Producer Grants

www.rurdev.usda.gov/BCP_VAPG_Grants.html

The Value Added Producer Grant program, administered by the USDA, is a competitive grants program. The funds (up to \$300,000) are available to farmers who want to develop a value-added product from a crop that they grow. Funds may be used for feasibility studies or business plans, working capital for marketing value-added agricultural products, and farm-based renewable-energy projects.

Washington State Department of Agriculture (WSDA)

www.agr.wa.gov/FoodAnimal/Organic/MaterialsLists.aspx

The WSDA Organic Food Program reviews materials allowed in organic production and publishes the WSDA Brand Name Materials List on the Web.

Articles

Theuer, Richard. 2012. *Nonprocessing Handling: Navigating the Gray Regulatory Area Between the Farm and the Factory*. Organic Processing, Vol. 9, No. 1.

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Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA is an equal opportunity provider, employer and lender.

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This publication is available online at:

www.attra.ncat.org

or by calling NCAT's ATTRA project: 800-346-9140

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For more information, please contact the
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