

Guidelines for Organic Certification of Dairy

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Northeast Organic Farming Association of Vermont (NOFA-VT)
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Transitioning an Existing Herd or Purchasing an Organic Herd

The following guidelines are based on the USDA National Organic Program Standards. Farmers planning to enter the organic market should consider all of the following areas and the time that will be required for compliance with the certification standards. Farmers may either transition an existing non-organic herd to organic production or purchase an organic herd.

VOF has a rolling admission process for dairy farms applying for organic certification. An on-farm visit from a member of the NOFA-VT Dairy Technical Assistance Program staff is required before the certification process begins. This on-site visit is intended to provide further information on topics such as organic standards, grazing management, animal health care, and financial planning.

The first step for a dairy farmer wanting to ship organic milk is to contact the Vermont Organic Farmers (VOF) office. Because every farm is different, you should discuss your plans with the certification staff before beginning the process. Once an initial farm visit is completed and the required paperwork is sent in, you will officially begin either the transition or certification process.

FIELD PRACTICES (§205.202-205.206)

Transitioning Fields to Organic Production

Fields qualify as organic if at least three years have passed since the last application of a prohibited pesticide, herbicide or synthetic fertilizer.

If some fields qualify as organic but others have had recent applications of prohibited products, the farm may still be able to get certified. Fields that qualify could produce organic crops, while other fields would be considered transitional. First and second year transitional non-organic feed must be sold on the conventional market and records documenting these sales must be kept. Third year transitional feed can be fed to transitioning livestock. For farmers who purchase an organic herd, third year transitional feed may not be fed to certified organic animals.

If you have been purchasing feed from a neighboring farm and will continue to do so, that land needs to be certified as well. Either the neighbor may get certified or you may include the neighbor's land under your certification. If you include another farm's field(s) in your application, you are taking responsibility for the management of that field and that feed can only be used or sold by you. If that person wants to sell certified organic feed to other people, they must certify their farm under their own farm name.

Buffer Requirements

If an adjoining farm is applying materials to their land that are prohibited in organic production (such as synthetic pesticides, herbicides or fertilizers), an adequate buffer between certified crops and the neighboring farm needs to be in place. The size of the required buffer depends on the method of application of the prohibited material and/or the physical nature of the border (open, hedgerow, etc.).

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The buffer needs to be sufficient to prevent prohibited substances used on the conventional farm from contacting the organic crops. VOF recommends a minimum 50 foot buffer zone, unless the buffer consists of a dense hedgerow. In this case, a 30 foot minimum buffer may be sufficient. For land next to residential properties, a 15 foot buffer would be sufficient. If adjacent land is managed organically but is not certified a buffer may not be necessary if you are able to verify that prohibited materials are not applied within the appropriate distance of the property line.

For example, an organic hayfield immediately adjacent to a conventional cornfield would have to create at least a 50-foot buffer that is left fallow or harvested and sold separately as non-organic hay. Harvests of buffer hay must be stored separately from the organic hay and sales of buffer hay must be documented as non-organic. Buffer crops cannot be fed to organic animals. Buffer zones must be maintained for at least three years after the last application of prohibited pesticides or fertilizers on the adjacent land.

Soil Fertility

The primary management goal for organic farmers should be to build healthy soils on their farms. A healthy soil is the foundation for healthy plants, healthy animals, and therefore a healthy farm.

The NOP Standards state: "A producer must select and implement tillage and cultivation practices that maintain or improve the physical, chemical, and biological condition of the soil and minimize soil erosion." [205.203(a)]

Fertility should be managed though rotations, cover crops, manure, compost, plant residues and applications of approved soil amendments. Non-synthetic mineral amendments (without synthetic additives), such as rock phosphate, lime, sul-po-mag, etc., are allowed. Synthetic soluble fertilizers are prohibited. Manure (including off-farm sources) is allowed from any source. The VOF office can provide a complete listing of reviewed allowed and prohibited fertilizers. If you are unsure if a material is allowed, call the office for confirmation before applying it. Use of a prohibited material would disqualify a field from organic production for 3 years.

If a field has not inputs applied for many years, it would qualify for organic production, but once certified, the farmer would be required to monitor soil fertility and add amendments to replace lost nutrients when necessary. Please keep this in mind for any remote fields, which may not receive inputs.

Seeds

Producers of organic crops are required to source certified organic seed if commercially available. If organic seeds are not commercially available, conventional, untreated seeds may be used.

Commercial availability means that the seed is available in the appropriate variety, quality or quantity the producer needs. Cost cannot be used to determine commercial availability. **The producer must document that purchased untreated seed was not available in organic form.**

There is no allowance for seed treated with prohibited materials. Crops grown from treated seeds cannot be sold as organic and the use of treated seed disqualifies the field from organic production for a period of 3 years.

Seed treatments such as inoculants must be approved for use in organic production. Some inoculant products are not allowed for use due to the presence of genetically modified bacteria in the product.

Contact the VOF office for a list of organic seed suppliers.

DAIRY HERD TRANSITION AND PURCHASING GUIDELINES (§205.236)

Transitioning a Herd

Farmers choosing to transition should implement a plan which includes a timeline from the day the transition starts and organic practices are implemented to the day that the farm will ship organic milk. It is a one year process for the herd, but can take up to three years to transition the overall farm, depending on the previous management of the land (more on this under 'livestock feed').

The transition is a **one-time opportunity**. It is a one-year process for a non-organic herd to convert to organic production. During this year, all animals (including young stock) must be managed according to the organic standards. **Once the transition starts, you may not continue to transition non-organic animals into the herd.** You must either raise your own replacements, or purchase them from other certified organic farms.

Example:

June 1, 2012. VOF approved transition start date.

Organic management begins for all animals.

New animals from this point forward must be raised on-farm or purchased from organic sources. June 1, 2013. Transition end date. Farm is certified. Producer starts shipping milk as organic.

During the one-year transition, producers must follow the standards listed below for feed, health care, living conditions, and record keeping for all animals.

Purchasing a Herd

Due to the high cost of transitioning an existing herd, many farmers have chosen to sell their herds and to purchase organic animals instead. This method bypasses the transition process and the producer may start shipping organic milk right away.

If you plan to sell your existing herd and purchase organic animals, it will be necessary to get your land certified first before you begin to bring organic animals on to the operation. It is not possible to bring organic animals on to an operation where the land does not qualify for certification. Doing so would result in a loss of the organic animal's certification.

When purchasing organic animals, it is required to obtain both an itemized receipt and a current certificate from each seller. **VOF recommends that you consider the seller's testing protocol and herd health records before purchase.**

Purchasing a Herd and Also Transitioning a Group of Young Stock

Many farmers who are purchasing organic herds have inquired about keeping their calves and heifers and transitioning them as a group. A farm may transition their young stock in addition to purchasing organic cows. In this case, the transition paperwork would be submitted for this group of transition animals only.

It is not possible to transition older and younger groups separately with different transition dates. The transition is a one-time opportunity with one start date and one end date.

Practically, the start date for the transition of young stock would coincide with the arrival of the certified organic milking cows. This way the milk from the organic cows would be used to feed the calves now under organic management. From this point forward all animals on the farm

would be managed organically. All groups of young stock must be transitioned at the same time.

This scenario works best when all young stock that transition are young enough that they will not freshen before the transition year is up. Bred heifers that would calve before the transition year is completed cannot be transitioned in the same facility because the milk from these animals does not qualify for organic production until the transition year is over. VOF does not allow a situation where organic and non-organic milk is produced on the same operation, as there is no way to verify that the non-organic milk is being segregated from the organic milk (see animal housing policy below).

ANIMAL HOUSING POLICY

- Organic dairy animals including young stock cannot be housed in a barn with noncertified dairy animals being fed non-organic feed.
- Organic milking animals and non-organic milking animals cannot be housed in the same barn as the chances of co-mingling of organic and non-organic milk are too high.
- Non-organic dry cows cannot be housed in the same barn as organic milking animals as the likelihood for co-mingling of organic and non-organic milk is too high.
- If non-organic and organic animals are to be housed or pastured together, two forms of animal id will be required. All livestock must be managed organically and must be fed certified organic feed.

LIVESTOCK FEED (§205.237)

The NOP standards state:

Any field or farm parcel from which harvested crops are intended to be sold as organic, have had no prohibited substances applied to it for a period of 3 years immediately preceding the harvest of the crop.

Vermont Organic Farmers has interpreted this to mean that if you count backwards 36 months from the date the crop is harvested, the fields should have been free of prohibited substances. Put in another way, you start the 36 month count from the date the last prohibited substance was applied.

Example:

A farmer's last fertilizer application is on May 31, 2010

On May 31, 2011 he (or she) has ended his first transitional year.

On May 31, 2012 he (or she) has ended his second transitional year.

On May 31, 2013 he (or she) has ended his third transitional year.

This means crops harvested after May 31, 2013 can be certified organic.

For Transitioning Herds

Starting with the first day of the transition, all animals must receive 100% organic feed. The 100% organic feed ration can include forages from land in your farm production plan that is being managed organically and is 'certifiable' or in the third and final year of transition.

The rule allows transitioning farmers to feed third year transitional feed that is part of their farm plan during their one year transition. In the above example, this means that crops harvested **AFTER** May 31, 2012 would qualify as compliant feed during the transition. This also means that if

we are discussing pasture, animals would not be allowed to graze these parcels until after May 31, 2012.

For Purchased Organic Herds

Starting with the day animals arrive on the farm, all animals must receive 100% organic feed. **No transitional crops may be fed to organic animals.** Transitional crops must be harvested separately and sold to a non-organic market. Records of these sales must be kept. Transitional pastures may not be grazed until they are certifiable.

Accepted for feed

- 100% of feed grains and forage, including pastures, managed by organic production practices and if applicable, organically, handled.
- Feed additives and supplements consistent with the National List §205.603. All vitamins and minerals allowed (if FDA approved).

<u>Purchased Feed</u>

All purchased grain and forages must be certified organic. **You must keep all receipts as documentation of these purchases.** The receipt must state the seller's name, the transaction date and include the amount of product purchased. Purchased hay and forages must also be accompanied by a valid certificate. VOF also recommends obtaining a certificate for all organic grain purchased outside of Vermont.

All feed supplements, including minerals and salt blocks must be approved by VOF. Antibiotics, GMO-derived products, animal by-products and synthetic preservatives are not permitted in any feed products. Be sure that any mineral supplements do not contain prohibited ingredients (such as mineral oil). Agricultural substances in feed supplements (molasses, soy oil, roughage, etc.) must be organic. A list of approved products is included in the VOF Livestock Healthcare List. Please do not use a product that is not on this list without first having VOF review the product for compliance.

Prohibited

- Use of animal drugs, including hormones, to promote growth
- Plastic pellets for roughage
- Urea or manure added to feed or in feed formulas.
- Direct fed mammalian or poultry by-products such as animal fats and rendered products (does not include fishmeal).
- Providing feed supplements or additives in amounts over what is needed by the livestock for nutrition and health.

Two Main Sources of Certified Organic Bulk Grain in Vermont are:

- 1. Green Mountain Feeds, Bethel, VT Eric Dutil, (802)234-6278
- 2. Morrison's Feeds, Barnet, VT Mike Thresher/Les Morrison, (802)633-4387

Contact the VOF office for a complete list of dealers who offer organic grain in the Northeast and Canada. We can also provide you with a list of certified organic forages for sale in your area.

CALF MANAGEMENT

Calves must be fed organic milk and organic feed. The use of milk replacer and medicated calf grain is prohibited.

Calves may not be individually housed after 6 months of age.

The VOF Livestock Healthcare List provides a list of approved products for treating calf scours and other health issues.

PASTURE (§205.240)

Ruminants are required to have daily access to pasture during the grazing season. During the grazing season, the producer must provide not more than an average of 70% of the animals dry matter demand from stored feeds and concentrates. That is, ruminants must be provided with an average of not less than 30% of their dry matter intake from grazing. The producer will calculate this in their annual certification application based on their feed rations in the grazing and non-grazing seasons. These numbers will be verified at the annual inspection visit.

The following sample forms are enclosed:

- Dry matter intake calculation form from the annual application
- Grazing season feed ration change record form

Pastures must be managed as a crop in a way that ensures pasture of sufficient quality and quantity is available to graze throughout the season. The producer will complete a pasture plan as part of their annual certification application. The plan will include detailed information on grazing system design and management, such as stocking rates, periods of occupation for paddocks, pasture grass heights before and after grazing, and regrowth/rest periods before regrazing a given area. Producer must include how pastures are managed to minimize the spread of disease and parasites and also prevent erosion or water quality problems. In addition, access to streams and rivers must be restricted or managed in order to prevent these problems. Fenced riparian buffer zones are recommended along waterways to stabilize banks, reduce runoff and erosion and provide wildlife habitat.

LIVESTOCK LIVING CONDITIONS (§205.239)

The producer of an organic livestock operation must establish and maintain livestock living conditions that accommodate the health and natural behavior of animals including:

- Year-round access for all animals to the outdoors, shade, shelter, exercise areas, fresh air, clean water for drinking and direct sunlight. Barnyards may be used to provide access to the outdoors during the non-grazing season provided they are large enough to allow all livestock occupying the yard simultaneously without crowding and competition for food. Continuous total confinement of any animal indoors is prohibited.
- Appropriate clean, dry bedding. If the bedding qualifies as roughage (hay, straw, etc.), it must comply with the feed requirements and be certified organic.
- Shelter designed to allow for natural maintenance, comfort behaviors and opportunity for exercise while also allowing for good ventilation and air circulation.
- Animals may not be confined or tethered in such a way that prevents them from lying down, standing up, fully extending its limbs and moving about freely.
- Housing must provide daily outdoor access during the non-grazing season. Animals 6
 months of age and older must have daily turnout, even if only an hour a day during the
 winter months.

Before seeking certification, producers should consider how they will meet the winter outdoor access requirement. This would include heifers in tie-stall barns without adequate barnyard access or those housed at off-site locations. If the set-up is inadequate, the producer must have a timeline for coming into compliance with the outdoor access standards.

The producer of an organic livestock operation may provide **temporary** confinement for an animal because of inclement weather; the animal's stage of production (except that lactation

is not a stage of life); conditions under which the health and safety of the animal could be jeopardized; risk to soil or water quality; preventative healthcare procedures or the treatment of illness or injury; breeding; and 4-H or other youth projects. Ruminant animals may also be confined one week for dry off, three weeks prior to parturition, and one week after parturition. Newborn dairy cattle may be confined until 6 months of age. Animals may also be confined for periods of milking, providing that milking is scheduled in a manner to ensure sufficient grazing time to provide an animal with an average of at least 30% DMI from pasture. Please note: While animals can be temporarily confined during extreme weather conditions, the entire winter season cannot be considered inclement weather as a reason for keeping animals confined.

Manure must be managed in a manner that does not contribute to contamination of crops, soil or water, by plant nutrients, heavy metals, or pathogenic organisms and optimizes the recycling of nutrients.

LIVESTOCK HEALTH CARE PRACTICES (§205.238)

Animal health is the result of ongoing management efforts to create living soils, provide nourishing forage and feeds, and improve the quality of livestock life. Animals must be kept in a healthy, low stress environment that emphasizes prevention. Only health care treatments approved by VOF are allowed for use on organic livestock. **A list of approved products is available by contacting the VOF office**. Please do not use a product that is not on this list without first having VOF review the product for compliance. In general, health care products with synthetic active ingredients are prohibited for use in organic livestock production **unless** they are specifically included on the National List of synthetic materials allowed for use in the National Organic Program standards (Section 205.603).

Producers must keep a written record of all healthcare products on the farm in addition to a 12-month herd health history that is submitted with the application for certification. Health records must include the date, animal id number/name, health issue, treatment administered, and follow-up if applicable. Producers must use preventative health care practices and may use approved treatments.

Dairy farmers wishing to transition their operations to organic must follow the organic health care standards during their one-year transition prior to shipping organic milk.

Accepted

- Selecting species and types of livestock suitable to the conditions on their farm and resistant to prevalent diseases and parasites.
- Providing feed sufficient to meet the needs of the animals, including vitamins, minerals, protein and/or amino acids, fatty acids, energy sources, and fiber.
- Establishing appropriate housing, pasture, and sanitation to reduce diseases and parasites.
- Providing animals with the opportunity for exercise, freedom of movement, and reduction of stress.
- Performing physical alterations when needed for the animal's welfare, taking care to minimize pain and stress.
 - Dehorning of livestock is allowed but should be done at an early age (VOF recommends the use of approved anesthetics such as lidocaine and xylazine).
 Dehorning pastes are prohibited.
- Administering vaccines and other veterinary biologics.

When preventative measures are insufficient to prevent sickness, producers may consult the National List and the **VOF Organic Livestock Healthcare List** for allowed medications.

Prohibited

- Withholding treatment from animals to maintain organic status.
- Administering any animal drug in the absence of illness.
- Use of hormones for the promotion of growth of livestock.
- Selling, labeling, or representing as organic any animal or animal product that has been treated with antibiotics, a synthetic substance not on the National List, or any prohibited non-synthetic substance.
- Tail docking.

It is prohibited for a producer to withhold medical treatment to maintain organic status of the animal. If an animal must be treated with a prohibited product, such as antibiotics, to save its life that animal's milk can no longer qualify as organic, even after the FDA withholding period. The animal must be sold off the farm as non-organic and a receipt must be kept as proof of sale. Calves or heifers treated with antibiotics must also be sold once they recover after treatment.

Use of Antibiotics

Selling, labeling, or representing as organic any animal or animal product that has been treated with antibiotics is prohibited. In an emergency, a producer must use antibiotics if necessary to save the life of the animal or to prevent suffering. Use of antibiotics should be based on the recommendation of a vet. Withholding treatment of antibiotics from animals to maintain their organic status is prohibited. If a producer uses antibiotics, they <u>must</u> do the following:

- Record the event in their health records.
- Notify the VOF office of the situation.
- Segregate the animal to prevent contamination of organic products. For example, a
 dairy cow must be marked to prevent the milk from going in the bulk tank. In addition,
 the milk may not be fed to calves.
- Sell the animal to a non-organic market.
- Document the sale of the animal.

For the offspring of the treated animal to qualify as organic, the treatment must not occur during the last third of gestation. In addition, the offspring cannot nurse on an animal that has been treated.

Allowed Synthetic Medications

Allowed synthetic medications are listed on the **VOF Organic Livestock Healthcare List** and the USDA National List.

Oxytocin Use

Oxytocin is a hormone that is allowed with restrictions. It is prohibited for routine or long-term use. It may only be used when necessary in post-parturition therapies.

Parasiticide Use

Livestock producers are encouraged to minimize parasite infestations by quarantine and fecal exams for all incoming stock, good pasture management, maintaining clean facilities and culling seriously infected animals. VOF recommends that producers have a parasite management plan for preventing infestations. In addition, biological control methods and nonsynthetic controls are permitted.

Use of parasiticides (de-wormers) is allowed only in health care emergencies and in the case of acute and dangerously high levels of infestation. Parasiticides are allowed when preventative practices and veterinary biologics are inadequate to prevent sickness.

There is a 90-day withholding period for lactating dairy cows treated with parasiticides. Routine use of parasiticides is prohibited for dairy stock. Parasiticides can only be used when preventative methods in the producer's Organic Systems Plan (application) do not work.

Currently the only synthetic parasiticides allowed for use are Ivermectin, Moxidectin & Fenbendazole. **Synthetic parasiticides may not be used on animals intended to be sold as organic meat.** If a producer uses an allowed parasiticide, they must do the following:

- Record the event in their health records including withholding time, if applicable.
- Notify the office of the situation.
- Segregate the animal to prevent contamination of organic products. For example, a dairy cow must be marked to prevent the milk from going in the bulk tank. In addition, milk may not be fed to calves.
- If applicable document sale to non-organic meat market.

Breeding

Accepted
Natural service
Artificial insemination

<u>Prohibited</u>
Use of breeding hormones

RECORD KEEPING (§205.103)

Written records must be kept on an ongoing basis. You will be required to supply a year's worth of records when you reapply for certification each year. Records are essential, as organic certification is about verifying your farming practices to a third party. It is believed that keeping records can help producers improve their management. VOF has record keeping forms available or you can use your own system.

Records that must be kept by livestock producers include:

- Dates and justifications for all medications administered
- A health care product inventory listing all livestock medications on the farm
- An animal inventory record that identifies all animals on the farm
- Records of all animals entering and leaving the farm
- Receipts for any purchased organic animals and/or organic forages. Purchase must be
 accompanied by both an itemized receipt and a copy of the seller's certification
 document. Livestock and crop transaction certificates are available through the VOF
 office if needed.
- Organic grain receipts
- Vet receipts showing treatments provided with animal id number/name
- Receipts from any other service providers (ex. hoof trimming, IBA dealer, etc)
- Feed ration change records during the grazing season
- Field records with dates and rates of all inputs applied for each field and harvest yields from each field

Receipts for purchased stock, feed, supplements and inputs for certified feed production on the farm as well as sales invoices for products sold off the farm as organic must be kept to ensure a complete audit trail.

MARKETING (§205.272, §205.303)

While you may become certified to produce organic milk, it is important that you first find a processor to purchase your milk. It is the farmer's responsibility to make that arrangement before they are certified. We strongly recommend you sign a contract with a buyer before you begin

your one-year transition of animals or begin purchasing organic animals.

There are Three Primary Milk Buyers for VT Organic Dairy Producers:

- 1. Organic Valley/CROPP John Cleary at (612) 803-9087
- 2. Horizon Organic Billie Jo Kiel at (303) 489-4121
- 3. Stonyfield Organic Kyle Thygesen at (802)369-0267

NOTE: Processors that buy organic milk may have their own standards and requirements in addition to the National Organic Program requirements. Be sure to learn what their requirements are before getting certified.

ECONOMICS

It is important for farmers considering the transition to calculate the financial and economic impacts that organic production will have on their operation. This requires analyzing the farm business prior to the transition, as well as making projections using estimates of income and expenses for organic production. Such calculations will shed light on areas of the operation that need to be changed or closely monitored.

UVM Extension and the NOFA-VT Dairy Technical Assistance Program are two resources to use for help in this area. It is extremely useful to talk to other farmers who have made the transition and get their experience first hand. You can get a list of VOF certified organic dairies from the office.

NOFA-VT's Dairy Technical Assistance Program offers on-farm visits to assist producers with grazing and pasture management, parasite management and herd health issues. Also available are articles, fact sheets and books, as well as a farmer-to-farmer mentoring program. In addition, NOFA-VT has a revolving loan fund to provide financing to farmers who are making the transition to organic or sustainable agriculture. Please contact the office if you are interested in either of these programs.

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