

Questions and Answers Regarding Canadian National Standards for Organic Agriculture

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General principles and Management Standards

1. Scope

1.4 Prohibited substances, methods or ingredients in organic production and handling

What level of GMO would be acceptable in seeds used for production under organic standards? Is it the responsibility of the operator or of the seed trader to check the GMO contamination of the seeds sold for organic production? (41)

Section 1.4.1 (a) prohibits the use of all materials produced through genetic engineering. Where there is a risk of contamination, the operator is responsible to document that GE materials are not used. (Section 4.4) Testing is not mandatory although Certification Bodies have the discretion to test when fraud or contamination is suspected.

Does the use of x-rays (at customs inspection) constitute irradiation under the standard? (45)

No – x-ray technology used to inspect at border crossings is not irradiation as defined and prohibited by the Standard.

Are "cell fusion" techniques used by seed breeders acceptable under the Standard? (123)

Cell fusion is only allowed within the same taxonomic family. Refer to the definition of Genetic Engineering in Section 3 (32.310)

Is the use of cloned animals allowed? (148)

No. All of the conditions listed in 1.4.1 (a to l) are forbidden. The origin or lineage of animals (1.4.1 k) needs to be known to ensure that no cloned animals are used.

Can inputs, which have been produced using substrates from GE plants, be used in organic food production? (88)

As an interim interpretation, and until such time as the Canadian Organic Standard is revised, inputs produced using GE substrates may be used with the following restrictions:

- 1) Operators must only use inputs grown on GE substrates when it has been documented that there is no commercially available non-GM alternative.
- 2) Inputs resulting from the use of genetically modified microorganisms are prohibited.
- 3) Operators must obtain from the supplier written confirmation that no traces of the GM material persist in the final product.

Note: The Standards Interpretation Committee (SIC) has received a number of questions which relate to the approval of inputs which may have been produced using a substrate derived from GM plants, usually corn or soybeans. The Canadian Organic Standard states in section 1.4.1:

"When producing or handling organic products it is forbidden to use any of the following substances or techniques; a) all materials and products produced from genetic engineering... except for vaccines only that have been grown on genetically engineered substrates but are not themselves a product of genetic engineering."

In stating a specific allowance of "vaccines only" grown on genetically engineered (GE) substrate, the Standard implies that all other inputs grown on GE substrates are prohibited. However, in researching the question, the SIC identified many other inputs that are currently in use, which cannot be sourced from a supplier who is able to guarantee that no GE

substrates are involved. For example:

- Farm Inputs: antibiotics, Bacillus subtilis, compost starters, Rhizobium sp, and vaccines.
- Food Additives & Processing Aids: ascorbic acid, citric acid, cultures, vitamin B, vitamin C, yeast products, xanthum.

Preliminary research by the SIC also revealed that many of these products are vital to the organic sector, and that to rule according to the strictest interpretation of the Standard and prohibit them would effectively prevent some current operations from continuing. The practices of our two major trading partners, with whom we have equivalency agreements, were also looked at. It appears that neither the US or EU have resolved the discrepancy between principle and practice. The global practice, in fact, seems to be very similar to our own, where the status quo is to allow inputs grown on GE substrates where no substitute is available.

In Canada, the body responsible for revision of the Standard is the CGSB Committee on Organic Agriculture (Technical Committee). The SIC has referred this question to the Technical Committee (TC), since a definitive conclusion must come from them by way of revision of section 1.4.1. However, at the time of this statement (June, 2012), the Canadian General Standards Board (CGSB) is inactive due to absence of funding. Certifying Bodies and operators need clarification, and without some clear statement on the issue, various interpretations could result in confusion and disadvantage for some operators.

Is Lysine, produced using a fermentation process and a specially selected bacteria synthetic or non-synthetic? Providing the bacteria are non-GE, would this form of Lysine be compliant with the standard if used as an ingredient in livestock feed? (145)

Lysine products such as lysine sulphate produced through biological fermentation fall within the Standard's definition of non-synthetic and are allowed. The bacteria which are used in the fermentation process must be non-GMO. Products grown on GMO substrate are allowed only if there is no commercially available alternative. Product grown on GMO substrate must be tested to ensure that the final product contains no GMO material. All forms of lysine HCL are non-compliant due to post fermentation chemical processing. Preference should be given to sourcing high lysine grains and legumes.

Is the use of ultraviolet radiation to diminish microbial flora admissible in foods such as milk and cheese? (152)

Ultraviolet light does not fall within the definition of Food Irradiation as set out in "Definitions" (3.1) and prohibited in (1.4.1 h). It is therefore not prohibited as a treatment of organic food at this time, however 7.2.12.2 prohibits the use of ultraviolet light to sterilize sap. The question of whether or not to revise the Standard to include a clarification of the use of ultraviolet radiation has been referred to the Organic Technical Committee.

3. Definitions and terminology

Is cell fusion allowed in organic production? (199)

No. Cell fusion which combines plants of different taxonomic families (such as sagebrush and grape) is not allowed. Cell fusion is only allowed between members of the same taxonomic family. See the definition of 'Genetic Engineering' in Section 3.

4. Organic Plan

In the case where there is a change in management control from one manager to another is a 12 month transition period necessary? (58)

A change in management control of an organic operation does not necessitate a 12 month transition period. It is a new operation that requires a minimum of 12 months of supervision by a CB, not a new operator.

Does the requirement for keeping records that provide traceability require that a specific format be used for those records? (100)

No. There is no specific format for record keeping prescribed in the Standard. Records must be readily auditable and contain sufficient detail to satisfy the record keeping requirements of 4.4.1.

5. Crop Production

5.1 Land Requirements for Organic Crop Production

Does the requirement, in 5.1.1, that land be in compliance with the Standard for 12 months prior to harvest apply to new fields added to an existing application? (8)

"The specific requirement of 5.1.1 for a production unit to have a full 12 months of supervision by a Certifying Body before a harvested crop, is intended for new operations. Existing operators adding fields to their management must demonstrate compliance with all other aspects of transition, including withdrawal periods for prohibited substances." (Reference, 5.1.1)

What are the effects regarding certification, of an unintentional spill of plastic pellets onto and organic field? (67)

The standard requires 36 months transition after the application of a prohibited substance by the operator (5.1.1 - 32.310). Unintended contact is covered under 5.1.4. Depending on the nature and extent of contamination, buffer strips around the contaminated zone and/or a transition period may be reasonable ways of maintaining the organic integrity. A prescriptive solution that applies universally to all cases of potential contamination is not possible, but in every case the degree of risk must be assessed and every attempt must be made to mitigate the negative impact on the final product. (see organic principles III- organic practices paragraph 5)

Can manure from livestock raised in cages be used, if the farm has a nutritional deficit and no other manure is available within a reasonable distance? (83)

As per 5.1.1.a, only manure from caged animals that cannot turn 360 is prohibited (e.g. manure from sows in farrowing crates). There are no exceptions.

Is it parallel production if the same seedling type production is separated by time? (57)

The growing of visually indistinguishable crops (organic and non-organic) non simultaneously does not constitute parallel production. This rule applies equally to all field crops and greenhouse production, including seedlings.

Can parallel production be allowed if management to avoid co-mingling is documented? (1)

The standard (Section 5.1.2) prohibits parallel production of most non distinguishable crops by the same enterprise. Some exemptions do exist (e.g. perennial crops (already planted), agricultural research facilities, production of seed, vegetative propagating materials and transplants) with conditions. Refer to Section 5.1.2 for further details. Post harvest operations are not subject to this prohibition

Can seeds be considered an input as opposed to a crop, for the purpose of allowing seed companies to practice parallel production? (2)

Seed companies can practice parallel production. Refer to 5.1.2.

Are there any exceptions to the rule against alternating between organic and non-organic production outlined in 5.1.6? (6)

The intent to section 5.1.6 is to prevent deliberate abuse. CB's may be faced with situations that fall in this definition; but, that do not demonstrate a deliberate abuse of alternating production. In these cases, the CB should note that although the organic certification lapsed

for a period of time, the operator has not intentionally violated 5.1.6. (Reference, 5.1.6). These cases could include:

- instances where the loss of certification was beyond the control of the operator (e.g. mandated use of a prohibited substance, natural disaster, financial failure of the enterprise)
- instances where the loss of certification is unconnected to the management or operational decision making connected to the organic operation (e.g. death of a family member, marital distress, inter-generational transfer).

A producer is feeding all his organic livestock feeds to non-organic livestock. During storage they may be comingled with non -organic feeds purchased from off the farm. Is there any risk that by doing this the producer would compromise the ability to certify future crops from the same fields? (97.1)

No. At the point in time where separation between organic and non-organic feed is compromised, the feedstuff in question loses organic status. This has no effect on the organic integrity of the field and the capability to produce organic feed in subsequent years. If feeding occurs on the field it must be non GMO feed.

Is the buffer zone around treated posts permanent or transitional? (12)

The standard does not prescribe any buffer zone surrounding treated fence posts. This must be determined on a case by case basis.

What is required for a certified farm to retain the possibility of future certification beyond an intervening period when no certification is required for the sale of product? (97)

In the event that the operator has no crops to sell, and wishes to allow certification to lapse, but desires to retain the possibility of certifying again in the future, it would be necessary to maintain records documenting compliance with the standard. The application to re-certify would have to be done in compliance with requirements of the Organic Products Regulations as they apply to new operations. 5.1.6 refers to alternating between the use of organic and non-organic production methods, which implies the use of prohibited substance.

How should the minimum buffer zone be measured in an orchard? (138.1)

The distance is measured from drip line to drip line between an organic orchard and adjacent non-organic block. If a portion of some of the trees is within the 8 meters, the entire harvest from those trees is harvested and sold as non-organic. As tree canopies expand with time such buffer areas need to be checked annually to reaffirm compliance.

Could a buffer zone larger than 8 m. be required in special circumstances, for example when prohibited substances are being applied on the windward side of the organic orchard? (138.2)

5.1.4 states that "distinct buffer zones or other features sufficient to reasonably prevent contamination are required". If there is a risk of contamination, an 8m or wider buffer (5.1.4 a) or other means (5.1.4 b) must be employed. The choice of methods used and responsibility to employ sufficient means lies with the operator and must be approved by the CB.

Can livestock feed harvested from the buffer zones around organic cropland be fed to livestock in transition to organic? (149)

As per 5.1.5, feed harvested from the buffer zones is non-organic. When transitioning livestock to organic status, feeding the buffer zone feed would be the same as feeding conventional feed.

5.2 Environmental factors

Are the lubricants used in harvesting equipment regulated by the Standard? (122)

There is no reference to the maintenance or lubrication of harvesting equipment in the Standard. Maintenance and lubrication of harvesting equipment is included under 5.2 Environmental Factors which states "measures shall be taken to minimize the physical movement of substances prohibited by 1.4.1." Equipment must be well maintained to minimize potential contamination.

Are there any guidelines for cleaning farm equipment that is shared with non-organic operators. Could the sharing of equipment jeopardize certification? (147)

5.2.1 states "Measures shall be taken to minimize the movement of substances prohibited by 1.4.1 from neighbouring areas onto organic farmland and crops". Where there is a risk that shared equipment could convey prohibited substances, seed, or crop, it must be adequately cleaned to ensure that contamination of organic product is prevented. The operator must document the cleaning process.

Would dipping untreated wooden posts in paraffin wax or using a polyethylene sleeve be allowed under 5.2.2? (186)

Yes. Paraffin or polyethylene coverings can be used. The prohibition of wood treatments in 5.2.2 was aimed at eliminating toxins commonly used to prolong the life of wooden posts.

5.3 Seeds and planting stock

Does the requirement to use organic seed, tubers etc. (5.3.1) preclude the use of seed grown on transitional land within the same operation? (113)

Seed grown on transitional land is acceptable since it meets the requirements of 5.3.1 "grown in accordance with this standard", and has not been grown using prohibited substances or techniques.

Are propagules produced through plant tissue culture micropropagation included within the provisions of CAN/CGSB-32.310 par. 5.3.1, requiring that they be produced in accordance with the Standard? (203)

Yes. 5.3.1 applies to propagules produced through plant tissue culture micropropagation.

Are seeds produced on buffer strips able to be planted in organic fields? (17.1)

Seeds grown on buffer strips under the Standards are the same as those grown on conventional farms (see 5.1.5). Exceptions to the use of organic seeds are specified in section 5.3.2.1 (Reference, 5.3).

Can non-organic common seed be used if organic common seed is not available? (17.2)

For the purposes of 5.3.2.1, "common" could be considered a varietal distinction subject to the exceptions to the use of organic seeds. See also section 3 Definition of "commercial availability."

What is the definition of "untreated seed" as it applies to 5.3.2.1 (32.310)? More specifically, does the use of "bleach cleaning" render the seed outside this definition? (77)

Untreated seed in 32.310 - 5.3.2.1 is defined as seed which has not been treated with synthetic pesticides prohibited by this standard. It does not denote seeds that have been cleaned. Table 4.3 lists substances which can be used to clean seed, including peracetic acid for example. Organic seed may not be cleaned with chlorine bleach as it is not listed on Table 4.3 for this purpose.

If perennial planting stock not treated with prohibited pesticides is planted on an organic farm, can the harvest be considered organic in the first year? (200)

The fruit from non-organic perennial planting stock can be compliant after organic management for 1 year (par. 5.3.2.2)

5.4 Soil fertility and crop nutrient management

Is the prohibition on hydroponics applicable only to greenhouses, or to all types of crop production? (74.2)

The prohibition of hydroponics is universal and not limited to greenhouses. See section 5.4 - 32.310.

Does the definition of crop rotation in section 3 of the Standard mean that growing the same crop 2 years in a row is inadmissible? (134)

While the standard states that crop rotation shall be as varied as possible, growing the same annual crop two years in a row is not prohibited. 5.4.1 and 5.4.2 require that a soil fertility and crop nutrient management program be maintained. A regular soil monitoring program can be used as evidence of "practices that maintain or increase humus levels, that promote an optimum balance and supply of nutrients, and stimulate biological activity in the soil".

5.5 Manure Management

Is the manure from a conventional farrowing operation compliant with the standard? (90)

Manure from systems where the sows are in traditional farrowing crates and not able to turn around is prohibited under 5.5.1. This is the intent of the Standard. The wording of 5.5.1 a. leads to the need for interpretation of the term 'fully caged system'. The part of the operation where traditional farrowing crates are used constitutes a 'fully caged system' under the standard and manure from those animals would be prohibited, notwithstanding the fact that some other animals in the barn are housed differently.

If GMO plants are used in the production of compost, can that compost be used to fertilize organic farms? We are concerned with families who buy conventional food and add the household waste to their compost. (129)

The presence of GMO plant material is strongly discouraged, but the possibility of use as compost feedstock is not eliminated. See table 4.2, 32.311 "Plant and Plant by-products": "Plant by-products not meeting this restriction may be used as composting feedstocks". However compost is subject to the following restrictions under "Composting feedstocks": "Except for animal manures, feedstocks that may be contaminated with substances not included in this standard or prohibited by par. 1.4.1 of CAN/CGSB-32.310, shall require documentation to confirm the absence of these substances OR documentation substantiating the common degradation of such contaminants during the composting process.

Do the restrictions in 5.5.2.5 apply also to the livestock grazing in orchards? (31)

The requirements of 5.5.2 are intended to prevent contact and possible bacterial contamination between the manure and the crop. This section does not necessarily apply to the harvest of orchard crops exclusively from the trees (no ground picking) and the presence of grazing animals and their droppings in the orchard does not necessarily violate the standard.

Does the presence of animal droppings in fields, orchards and vineyards require a waiting period as prescribed in 5.5.2.5? (159)

5.5.2.5 does not apply to incidental animal droppings such as those from wild animals or birds, grazing or working animals; however, 5.5.2.4 (a) does apply and requires diligence on the part of the operator to ensure that any activities under his/her control do not cause pathogenic microbial contamination of the crop.

5.6. Crop pest, disease and weed management

Can a farmer irrigate land from an irrigation system that uses Magnicide? (19)

Active substances included in Magnicide are not allowed for application to organic production units. If equipment that has been in contact with prohibited substances is thoroughly cleaned and can be shown to be free from such substances, it may be used to irrigate organic farms. Although irrigation equipment is not specifically mentioned in the standard, the principle outlined in 5.6.3 should apply.

Can the Magnicide treated canal be considered the same as equipment and thereby be permitted for use if the water carried by the canal can be shown to be free from Magnicide residue? (104)

Yes. Although active substances in Magnicide are not allowed for application to organic production units, when a farm is using irrigation water not under the operator's control, the operator must take reasonable precautions against contamination with prohibited substances.

6. Livestock Production

6.2 Origin of Livestock

What is the definition of "dairy animal" under the standard? (24.2)

A dairy animal is any animal in a herd that produces milk for human consumption.

Please clarify the meaning of 6.2.2 d. iii. Does it allow that animals could be repeatedly fed conventionally until the last trimester of pregnancy, and still give birth to offspring compliant with the Standard? (87)

Section 6.2.2 d. iii applies only to animals in transition. For animals already under organic management, the feeding of non-organic feed at any time during gestation would render the mother and offspring non-compliant. Beef cattle and dairy breeding herds cannot be rotated in and out of organic production. Refer to 6.2.4.

Can sexed semen be used in organic production? (40)

Yes, the use of sexed semen does not violate the standard.

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6.3 Transition to Organic

Can non-organic animals transitioned to organic management become acceptable a) for breeding ? b) for slaughter? (48.1, 48.2)

Breeding animals may be transitioned from conventional to organic management for use in organic production according to the terms specified in the standard. (see section 6.2.2, 6.2.3, 6.3). A non-organic animal will never comply with the standard for the purpose of slaughter and use as organic meat. Breeding males used on organic farms do not have to be organic. Section 1.4.1 still applies.

Does 6.3.3 apply to pasture used for poultry? In other words can the raising of pullets be timed to coincide with the transition of land rather than waiting until the pasture is CO to start a new flock? (99)

Yes 6.3.3 does apply to poultry pasture. Pasture for poultry must be fully compliant, or in the final year of transition, i.e. there must be verification that no prohibited substances have been applied for at least 24 months. The operation must be under the supervision of the CB for one year before the marketing of the organic livestock or livestock product.

When a beef cow herd is being transitioned to organic, does 6.3.3 give permission to use the transitional feed being produced on the farm, to feed gestating animals whose offspring will be eligible for sale as organic? (179)

Yes. Provided that the timing of the completion of the transition of the land on which the feed has been grown coincides with or precedes the birth of the organic offspring.

6.4 Livestock Feed

Can you give some guidelines around the use of the 10 day maximum in 6.4.1? (89.2)

Ten consecutive days is the maximum. If the feeding of non-organic feed was broken up into segments, potentially legitimizing a total period of longer than 10 days, each segment would have to be scrutinized separately for approval under 6.4.1.

If the conditions outlined in 6.4.1, which allow for temporary use of non-organic feed are met, would this allowance also extend to the use of non-organic bypass fat? (95)

No. The allowance to use non- organic feeds is intended to allow the operator to maintain the health of animals in the face of a loss of on-farm feed as a result of catastrophe when organic feed is not available. Bypass fat would not be included, unless it was part of the organic feed inventory on the farm at the time of the catastrophe.

Can the allowance of non-organic feed in catastrophic circumstances (6.4.1 a) be expanded to include commercial or logistical challenges outside the operator's control? (e.g. a shipment is held up by border inspection) (156)

No. The examples of farm scale catastrophic events cited in 6.4.1 (fire, flood, extreme climatic conditions) do not extend to commercial or logistical problems.

If a silage inoculant contains synthetic colouring agents, does that mean that it is prohibited for use in organic livestock feed production? (94)

See 6.4.4 j. Yes - the use of synthetic colouring agents makes the product non compliant for use in organic feed.

Is the operator required to obtain pre-approval for use of non-organic feed during a catastrophic event? (89.1)

No, the operator does not need pre-approval. However, the operator should notify their CB and explain the situation as soon as possible. It is the responsibility of the operator to

adequately and successfully demonstrate to the CB that 6.4.1 is applicable and the instructions laid out there have been met.

6.4.1 allows for the feeding of non-organic forage to breeding herds in the case of a regional forage shortage. If a producer anticipates running out of organic forage: (157)

a) Can they prepare by sourcing the non-organic feed before they run out?

Yes. The operator may source the non-organic forage ahead of time, and before feeding, must demonstrate compliance with the conditions of 6.4.1 b: record keeping, segregation, preference for forage grown without prohibited substances.

b) Which animals can be fed the non-organic feed and what are the implications for the status of meat and milk?

With the agreement of the CB, the non-organic forage may be fed to; 1) non-lactating dairy animals - without affecting their status in future lactation. 2) beef cows or ewes that are not nursing offspring, without affecting the status of offspring in utero.

When calculating compliance with 6.4.3.c) of a summer ration for ruminants, can pasture be considered "long-fiber forage"? (194)

No. 6.4.3.c addresses feed rations when animals are not on pasture. During the grazing season, 6.1.3 a) applies, and requires that ruminants obtain a minimum of 30% of their total forage intake from grazing calculated on dry matter basis.

6.5 Breeding

If a producer purchases non-organic non-gestating sows for breeding, brings them into a new operation site, then uses hormones to trigger and synchronize estrus, would the piglets born from these sows on this site be considered «organic» if these females have been under continuous organic management from the beginning of the last third of their gestation period? (195)

While the Standard allows for the introduction of non-organic breeding stock into an organic operation, it requires that from the moment of introduction, the operator complies with all the rules for organic livestock husbandry. The use of hormones to trigger estrus is specifically prohibited in 6.5.d), therefore the use of this technique would be a serious non-compliance.

Can a sow that has been treated with antibiotics produce piglets that are eventually sold as organic meat? (202)

The standard requires that from the moment of introduction, breeding stock comply with all organic animal husbandry rules. Section 6.7.4 permits the use of antibiotics when all other methods fail. Par. 6.7.8 states that animals which receive antibiotic treatment can never be sold as organic meat. If the antibiotic treatment and subsequent withdrawal period do not occur during either gestation or nursing, the offspring of a treated sow may be compliant with the Standard.

6.7 Livestock Health Care

Are steroid anti-inflammatory drugs allowed during physical alterations? (78.3)

No – 6.7.2, by specifically noting "non-steroid" implies that steroid anti-inflammatory drugs are prohibited for minimizing pain and stress during physical alteration.

Is the castration of kid goats allowed under the standard? (53)

Yes. While castration of animals, other than piglets, lambs and calves, is not specifically allowed, it is permissible by extension of the reference to other species.

Can beak trimming be carried out as a preventive measure or is the allowance for this practice under 6.7.2.a only relevant after a problem arises? (101)

Yes, the practice of beak trimming is acceptable as a preventive measure to ensure the welfare of poultry (6.7.2 a.). In order to remain compliant with the Standard, the operator must also document the other measures taken to prevent or control problematic behaviours. Since the Standard implies that this is an extraordinary event, it should not become the norm, and operators who employ this technique must review annually with the CB their plans to eliminate the need for beak trimming.

Is de-horning paste allowed? (29)

Yes, dehorning paste is acceptable under section 6.7.6.d.

In the case of using a treatment not listed in 32.311, where no withdrawal time is indicated on the label, must organic operators still observe a withdrawal? (78.4)

6.7.6 d. states that when drugs not listed on the PSL are used, a withdrawal period of 14 days or twice the label withdrawal shall be observed. If there is no label withdrawal 14 days must still be observed.

Is the use of fish oil as medical treatment (to treat bloat) prohibited? Are fish based animal health tonics prohibited? (22.3)

Fish oil and fish based health products are allowed as veterinary medicinal substances under 6.7.6 c.

In the case of a medication like ketoprofene, used therapeutically, is there a withdrawal period (78.5)

Yes. See 6.7.6 d. Ketoprofen is not listed in the PSL, therefore a minimum 14 day withdrawal is required

Is the use of therapeutic hormonal treatment , for example prostaglandins to treat metritis, allowed in dairy animals? If so, what are the restrictions and withdrawal times? (78.1)

For all treatments not listed on the PSL, a minimum withdrawal period of 14 days must be observed - see 6.7.6 d. Therapeutic use of hormones such a prostaglandin which is not listed on the PSL can be used when treatments listed in the PSL are unlikely to be effective, and preventive measures have failed. A 14 day withdrawal period must be observed. If prostaglandin is used in such a manner, as per 6.7.7, the animal is not eligible for use as organic meat, but this event is not counted as one of the "treatments" referred to in 6.7.6 e) iv. That 2 treatment restriction is only pertinent to antibiotics & parasiticides.

Can slaughter animals (intended for meat) receive two treatments per year of prohibited treatments and maintain certification? (24.1)

6.7.9 indicates that there shall be only one treatment of parasiticides not listed on the PSL for slaughter animals under a year and a maximum of two treatments for total lifetime of slaughter animals.

Can oxytocin be used to treat postpartum complications? If so what are the withdrawal rules? (78.6)

Yes. 6.7.7 specifies that hormones are acceptable if the use is therapeutic, not preventive. For oxytocin, the animal does not lose status for use as organic meat. The withdrawal time is

as stated on the label or 14 days, whichever is longer. (Table 5.3 Oxytocin and 6.7.6 d - 32.310.)

The standard states in 6.7.6 e. iv that "Dairy animals shall undergo only two treatments of combined antibiotics and parasiticides per year" Does this mean two separate incidents of treatment with antibiotics and parasiticides administered in combination or total of two treatments per year including each incident of an antibiotic or parasiticide as one treatment? (135)

6.7.6 e. iv means that the maximum allowable is a total of two treatments per year including each incident of an antibiotic or parasiticide as one treatment. For example when a combination of two drugs is supplied at the same time, they count as two treatments.

In the case of antibiotic use in dairy cows, if the operator provides test results to show that there is no residue in the milk, can the compulsory 30 day withdrawal period be shortened? (125)

No. 6.7.6 e. ii states the minimum withdrawal of 30 days after the use of any antibiotics, even topical applications in milking cows. No exceptions are specified.

Please clarify the meaning of the standard regarding use of parasiticides in 6.7.9 iv (slaughter) and v (milk) as to the loss of organic status and withdrawal periods. (78.2)

Parasiticides not listed in the PSL may be used on slaughter animals: once preventative measures have failed (6.7.9 b), fecal samples indicate there are parasites (6.7.9 b i), there are written instructions from a veterinarian specifying the product and method of parasite control to be used (6.7.9 ii). Withdrawal times are twice the label requirement or 14 days whichever is longer (6.7.9 b iii) and there can only be one treatment for slaughter animals under a year old and a maximum of two treatments in the life of the animal.(6.7.9 b iv). For dairy animals combined treatments of antibiotics and parasiticides must not exceed two per year. (6.7.6 e iv).

6.8 Livestock Living Conditions

Does housing for broilers require windows for sunlight to enter while the birds are confined? (82)

A –As per 6.8.1, natural light inside the barn is required but windows are not necessarily the only mean to satisfy the standard.

Are electric trainers allowed to manage animals in tie-stalls? (206)

Electric trainers are not explicitly prohibited by the Standard and can be used in dairy tie-stall barns as part of a management strategy to keep cows clean and prevent disease, in accordance with the requirements of 6.1.5 (minimize stress, prevent disease) and 6.7.1 c) (sanitation practices to minimize the occurrence and spread of disease). However, if the use of electric trainers is not carefully monitored and managed by the operator, violation of 6.7.1 d) (...provide conditions that allow for exercise, freedom of movement, and reduction of stress appropriate to the species...) or 6.8.1 c) (... provide sufficient space and freedom to stand up, stretch their limbs, turn freely and express normal patterns of behavior) would render the use of the devices non-compliant with the Standard.

What is the outdoor access requirement for rearing pullets? (86)

6.8.1 requires "...fresh air and natural daylight suitable to the species, its stage of production". As pullets going outdoors at a young age predisposes the birds to going outside later on as adults, it is especially necessary. See also 6.8.11.1.

If an operator arbitrarily confines turkeys for one week prior to slaughter, does this constitute non compliance with the Standard? (39)

The standard sets out a number of legitimate reasons for denying outdoor access. Turkeys or other livestock cannot be denied outdoor access for any reason other than those outlined in 6.8.2. Compliance with the minimum of 1/3 of the total life of the bird does not relieve the operator from the requirement for constant outdoor access where conditions permit.

Is 6.8.3 to be interpreted as a requirement to allow cows housed in tie stalls a period of exercise every day when possible (at least twice a week) or merely a recommendation to do so? (92)

Yes, 6.8.3 is a requirement, not merely a recommendation. The intent of the standard is to require exercise for cows on a regular basis. For an operator to fail to provide regular exercise for the entire winter season would clearly violate the standard.

When livestock are being confined in the final finishing phase (see 6.8.7b), and are not subject to pasture requirements, must the confinement facility be located on an organic enterprise? (116)

Yes. Compliance to the Standard and verification by the CB is required of the areas used for finishing including all buildings, facilities and outdoor access areas which are utilized by the organic livestock. The remainder of the farm is not required to be organic.

What is the space requirement for rearing pullets? (85)

There is no space requirement in the Standard for pullets. The requirements of 6.8.1 and 6.8.11.1 concerning the health and well-being of the animal apply.

What are the indoor and outdoor space requirements for pullets (immature laying hens)? (160)

While there are no indoor or outdoor space requirements for pullets specified in the Standard, Section 6.8 gives extensive guidance in evaluating living conditions, according to the needs of livestock. All of these requirements apply to pullets as well. In addition, since pullets are growing birds similar to broilers, the maximum density of 21 kg/m² set out for broilers in 6.8.11.9 can be used as guidance.

Please clarify the outdoor space requirements for poultry. Can a flock be split so that use of the outdoor area is rotated between groups? If so, does the total area required diminish? (37)

While the standard allows for exceptions to the outdoor access requirements, (temporary confinement) the total area available for birds outdoors must allow for the entire flock to be outside at the same time without exceeding the densities set out in 6.8.11.9 – for all poultry.

Is the space requirement for cattle (6.8.8) the same for all breeds or can an adjustment be made for smaller animals such as Jerseys? (158)

The Standard does not make a distinction for breeds of different sizes. The space requirements are the same for all cattle.

Can the organic operator choose to keep pigs confined, not allowing outdoor access, even when there is no risk to the animal caused by weather or stage of production? (196)

No. Complete confinement of pigs is non-compliant (par. 6.8.13.2). The standard sets out as the norm for animal husbandry, access to outdoors. It then states in 6.8.2 the specific exceptions to the rule which apply to all livestock.

7. Specific Production Requirements

7.1 Apiculture

Does the three year transition period apply to apiaries? (121)

No. The apiary site must comply with 7.1.7.1 which specifies that 12 months of organic hive management is required prior to the harvest of organic honey.

Are Corn and Soybeans considered "flower bearing crops" in reference to 7.1.9? (18)

Since the requirement for the 3000 metre buffer includes proximity to all substances prohibited in 1.4.1, the distinction between flower bearing and non flower bearing crops is irrelevant. Corn and soybean crops would still trigger the mandatory buffer zone unless managed in accordance with the Standards

7.1.9 states that apiaries must be separated by a buffer zone of 3000 meters from sources or zones where prohibited substances are present. Is there a transition time required between the last use of a prohibited substance in the buffer zone and the production of organic honey? (124)

There is no transition period required for the 3000 meter buffer zone. No prohibited substances can be present when bees are feeding.

Is the use of paraffin wax to treat hive materials acceptable in organic apiaries? (112)

Yes. The use of food-grade paraffin wax in this application is permitted if coated with beeswax. (7.1.12.1)

Does any use of a prohibited substance within 3000 meters of an apiary automatically disqualify the honey from achieving compliance with the Standard? (115a)

The requirement contained in 7.1.9 for a buffer zone of 3000 meters does not allow the presence of prohibited substances or their residues that present a risk of contamination to bees and their products during the period when the bees are feeding. Products such as but not limited to systemic seed treatments, agricultural pesticides, herbicides or GMOs may not be present within the buffer zone. Non-agricultural incidental presence of prohibited substances used on residential properties within the 3000 m buffer zone may pose an insignificant risk and not prevent compliance with the standard. Contaminants used by neighbouring home owners and other non-agricultural prohibited substances must be assessed as to the risk they pose to the bees and the honey.

What potential contaminants are specifically prohibited, and which ones may be assessed according to the risk they pose? (115b)

Agricultural pesticides, herbicides and systemic seed treatments, as well as GMO crops within the 3000 m buffer zone always result in non-compliance. Potential contaminants used by neighbouring home owners and other non-agricultural prohibited substances can be assessed as to the risk they pose to the bees and the honey. Generally, low density rural residences within the 3000 m buffer zone may not present a high risk if it can be established (e.g. with an affidavit) that there is no routine use of prohibited pesticides or herbicides. High density housing areas such as subdivisions or cities are however not suited to organic honey production if within the buffer zone of the hives, as use of prohibited substances are more difficult to detect and control.

Organic honey production typically cannot take place if the following are found within the 3000 m buffer zone: golf courses, garbage dumps or landfill sites, industrial complexes, very busy roads, or commercial non organic greenhouses/nurseries. There may be extenuating circumstances that must be assessed by certification agencies in each case.

7.2 Maple products

How close to a certified sugar bush can the use of a prohibited substance be allowed, without compromising the certification of the sugar bush? (13)

According to 5.1.4 and 7.2.1, the use of prohibited substances around maple production units would require the maintenance of buffer strips the same as those required for crop production (Reference, 7.2.1 7.2.8).

7.3 Mushroom production

Does the substrate for organic mushrooms need to be a) certified organic, b) composted? (4)

The operator should refer to 7.3.2. The growth substrate does not necessarily need to be composted (7.3.2 d refers to logs, which would be uncomposted). The substrate does not necessarily need to be certified organic (7.3.1 speaks of substrates obtained from vegetation grown in areas free from substances prohibited by 1.4.1). Materials contained in the substrate, for which there are no organic standards, must comply with 1.4.1 and be free from prohibited substances for a period of three years.

Can conventional straw be used as a compost feedstock for compost that is used to grow organic mushrooms? (178)

If the substrate (the medium on which the mushrooms are grown) is compost, it must adhere to the compost guidelines in the Standard and the rules governing composting feedstock (see table 4.2 Compost and Composting Feedstocks), i.e. conventional straw may be used. If the substrate is not composted in accordance with the Standard (hay, straw, etc.) it must be free from prohibited substances according to 7.3.2 c). It is strongly recommended to source organic composting feedstock. (see 7.3.1)

In the production of organic mushrooms, can table salt be used as a spot control measure for disease on mushrooms? (132)

No. This substance is not listed on table 4.3 as a pest control product.

7.4 Sprout Production

Please describe the difference between shoots and sprouts. (191)

Unlike sprouts, which are grown only in water, shoots may be seeded into a growth medium, as per 7.4.5. Shoot production must comply with all criteria in Subsection 7.4 (sprout production).

Does the requirement for water quality in 7.4.2 apply to all uses associated with sprout production? Could water for rinsing be exempt from this description? (84)

The provisions in 7.4.2 apply to all stages of production of sprouts. Water for rinsing is not exempt from this provision.

Is the rinsing of sprouts with chlorinated water allowed? If so, in what concentration? (150)

Chlorinated water may be used to rinse sprouts (7.4.2) provided the level of chlorine does not exceed the limit for safe drinking water.

Can soluble nutrients be added to the water used to grow sprouts? (74.1)

No. Soluble nutrients cannot be used in the water for sprout production. The French version of 7.4.4 is very clear in stating this intent.

Can organic and conventional sprouts be produced in the same facility if grown in visually distinguishable containers? (211)

No. Growing organic and non-organic sprouts of the same plant variety at the same time is parallel production and is prohibited. Where different varieties of the same species are produced simultaneously, the organic and non-organic crop themselves must be visually distinguishable.

Can synthetic acetic acid be used for the cleaning of seeds used for sprouts, as seeds are neither considered as food nor as a plant (PSL Table 7.3)? (210)

No. Only non synthetic acetic acid and other substances which can come in contact with food and are listed on table 7.3 can be used for cleaning seeds used for sprouts (per par. 7.4.6 in CAN/CGSB-32.310).

7.5 Greenhouse Crops production

Does the use of a "peat moss/compost etc. mix" satisfy the requirements of 7.5.1 for "a container system with soil"? (25)

Section 7.5.1 allows for container grown production with soil and prohibits hydroponics and aeroponics. In hydroponic production the soil is replaced by an inert substance. A compost and peat moss mixture does not constitute an inert substrate thus satisfies the requirements of "a container system with soil."

Is parallel production allowed in greenhouse production? (57)

No. Under the standard, parallel production is prohibited in greenhouse production. All of the crops dealt with in section 7 are subject to the prohibition on parallel production contained in 5.1.2.

Does the exemption from the rule prohibiting parallel production allow greenhouses to transition only part of their operation? (109)

Yes, the propagation portion of the operation may practice parallel production.

Does the use of culture medium (which is soil-less, but otherwise comprised of organic matter) during the initial phase of propagation (2 – 3 weeks) preclude this type of production from organic certification as per the requirements of CAN/CGSB-32.310 par. 7.5.1? (204)

The use of a culture medium, which does not meet the definition of soil but complies with the Standard, is allowed in the case of plant propagation.

8. Preparation and handling of organic products

8.2 Product composition

What are the restrictions on the up to 5% of non-organic ingredients allowed in production of organic products in the OPR? (16)

Non-organic agricultural ingredients are allowed in products labelled as "organic," provided that the organic form is not commercially available, and they comply with the Standards, including 1.4.1 and 1.4.2 and section 8. The total non organic content of the final product must not exceed 5% if the product is labelled as "organic" (Reference, Organic Products Regulations, 2009). Non agricultural ingredients must be listed on the PSL

Can livestock feeds which contain non-agricultural ingredients be certified? (65.1)

Livestock feed must meet the organic product requirements in Section 8 of the COS, and meet the labelling and advertising requirements in OPR section 24 and may contain necessary feed additives or supplements according to table 5.2 PSL (ref. 8.2.1 d).

Is collagen casing allowed in the production of organic sausage? (105)

Yes. Collagen casings are acceptable as an "agricultural product" and non-organic sources can be used if organic sources are not commercially available. All prohibitions listed in 1.4.1 apply.

In 8.2 of the Standard, what does the term "constituent of an ingredient" mean? Are incidental components or carriers considered constituents? (131)

Constituents refer to all the components contained in an ingredient. Every constituent of every ingredient including carriers or preservatives needs to be included in the calculation of constituents' percentages and reviewed with regard to compliance with the PSL.

Does paragraph 8.2.1 c., which excludes salt from the calculation of organic percentage, apply only to sodium chloride, or could a sodium free substitute, such as potassium chloride also be excluded? (165)

Yes. The intent of 8.2.1 c. is to exclude salt from the calculation. If the sodium free substitute serves the same purpose as sodium chloride, it may be excluded from the calculation. The authors of the standard were likely referring to sodium chloride, but their intent could still be respected by treating sodium free salts with the same exclusion, provided that these serve only the same purpose in the product.

When processing a product which will be sold as 70-95% or 95% organic, must the operator use processing aids listed on the PSL (Table 6.6) exclusively? (20b)

When manufacturing a 70-95% or 95% organic product, all non-agricultural processing aids must be listed on in PSL 6.6 and all annotations complied with. If the processing aid is an agricultural substance the organic form must be used if commercially available. If not commercially available, non-organic agricultural processing aids can be used but must comply with 1.4.1.a, h, k and l and if listed in PSL 6.6 the annotations must be complied with.

Does the prohibition against using both the organic and non-organic form of an ingredient (8.2.5) apply to different varieties of grapes used in a wine, or different flours (e.g. barley and wheat) used to bake a single bread? (173)

Under 8.2.5, ingredients that are recognized as having distinct qualities could be considered as separate ingredients, even when they fall into the same general category of ingredients such as "flour" or "grapes". In the examples given, it would be possible to use one ingredient in organic form and the other in non-organic form without violating 8.2.5. For products that are organic (>95%), this is restricted to when the non-organic agricultural ingredient is less than 5% of the total and is not commercially available in organic form. For products between 70-95% organic content, commercial availability does not apply. In both categories, the organic and the non-organic ingredients must be listed on the label to be compliant with labelling requirements in the OPR and the guidelines from CFIA.

8.3 Processing and Handling

Can a non-organic processing aid be used in the production of a category 2 (70 - 95%) product? (20)

The PSL listing of processing aids (6.6) does not apply to processing aids used in the non organic ingredients used to produce the 70-95% organic products. However section 1.4.1 does apply. Use of non agricultural processing aids in the production of the final product is limited to those listed on 6.6.

What are the requirements for removal when cleaners are approved for use under the provisions of 8.3.8 and are not listed on 7.3 or 7.4 of the PSL? (106)

The operator is required to document that the product has been effectively removed. The methods of removal are not specified, but their effectiveness must be adequately demonstrated. The operator is also required that any product used can be neutralized to minimize environmental impact. Refer to 8.3.8.b.& c.

What is the distinction between acceptable cleaning agents for milking equipment on farms vs. those used in processing facilities? (209)

Section 8 of the Standard applies to the preparation and handling of organic products. In particular 8.3.7 and 8.3.8 give direction for cleaning food contact surfaces which would be appropriate both on dairy farms and in off-farm dairy processing facilities.

Is it necessary to wash milk trucks at a processing facility under the supervision of a certifying body in order to maintain certification of the milk? (108)

No. There is no requirement to wash bulk milk trucks specifically at a processing facility placed under the supervision of a certifying body. In order to comply with the Standard, documentation that substances used in the cleaning process have been removed must be maintained.

Are CB's required to verify that staff working in facilities where both organic and conventional foods are processed have the necessary training to result in compliance with the Standard? (130)

CB's are required to verify compliance with the Standard. If in the course of inspecting a facility, it becomes apparent that staff who are responsible for maintaining organic integrity lack the necessary training needed to differentiate between organic and conventional processes, this could be the basis of a report of non-compliance. (see 32.310 - 4.4, 8.1, 8.3.10 c)

What are the requirements for water quality, where the water is used to wash organic vegetables? (128)

While there is no requirement for water quality in the Standard which applies specifically to washing vegetables, water must meet the requirements for potability as per local, provincial or federal authorities.

Can water that has been processed through an alkaline filtration system be used in the preparation or processing of an organic food product? (185)

Providing the resulting water falls within Health Canada's Guidelines for Drinking Water; pH 6.5 to 8.5 and no substances or processes prohibited by the Standard are used, the water is acceptable.

8.4 Pest management

When pesticides allowed under section 8.4.3 (not listed in PSL) are used in a facility, is the fact that the bait stations are clamped to the wall sufficient to ensure that no contact occurs? (38)

No. Where a pesticide not listed in PSL (32.311) is dispensed using a "fixed bait station" the operator must ensure that neither the pesticide nor the contaminated pest could come in contact with the organic product. For indoor use, no organic products or packaging materials may be present during the use of the pesticide.

Does 8.4.3 only apply to substances for pest control used inside facilities or also to substances used on the exterior? (212)

Section 8.4 applies to both indoor and exterior pest control. Note additional restrictions on indoor use. (8.4.3)

9. Emergency Pest or Disease Treatment

In the case of contamination with a prohibited substance used in a government sponsored pest control program, what are the implications for organic operators regarding suspension of certification? (69)

The standard requires 36 months transition after the application of a prohibited substance by the operator (5.1.1 - 32.310). Unintended contact is covered under 5.1.4. Depending on the nature and extent of contamination, buffer strips around the contaminated zone and/or a transition period may be reasonable ways of maintaining the organic integrity. A prescriptive solution that applies universally to all cases of potential contamination is not possible, but in every case the degree of risk must be assessed and every attempt must be made to mitigate the negative impact on the final product. (see organic principles III: organic practices paragraph 5).

What would be the result of an unintended contamination of an organic livestock operation with a GM rabies vaccine? (52)

Section 9 of CAN/CGSB 32.310 (including the informative note) addresses the issue of emergency pest or disease treatment. The evaluation of compliance or non-compliance following this theoretical scenario would depend on; the degree of contamination; the precise nature of the contaminant; the ability of the operator to identify and exclude affected animals. How and why the contamination occurred is not relevant to evaluating compliance

Permitted Substances List

Is the use of vitamin D allowed for fluid milk products if it contains a preservative not listed on the PSL? (137)

Organic operations in Canada remain subject to all applicable laws and regulations (PSL Introduction). Since the addition of vitamin D to milk is required by law, it must be included. The source containing a non-approved preservative may be used only if a fully compliant formulation is not commercially available.

What is the pathway for approving cleaners, or substances used? (3)

Operators should approach their Certification Bodies to verify the cleaner complies with the Standards. Approval of individual substances is the mandate of CGSB Technical Committee, through Permitted Substances List working groups (Reference, PSL).

Does the inclusion of Calcium Phosphate (monobasic, dibasic and tribasic forms) on table 6.3 for use in processing imply that these substances can also be used as soil amendment or Crop Production Aids? (Tables 4.2 and 4.3) (155)

No. The inclusion of substances on Table 6.3 for processing does not make them compliant for other uses. However, Table 4.2 does list mined minerals, making the natural form of calcium phosphate (apatite) acceptable as a soil amendment.

For soil amendments and crop production aids, is it enough that the active ingredients are compliant, or does the certifier need to review the list of inert ingredients and formulating agents? (168)

All substances contained in soil amendments and crops production aids must be disclosed by the supplier for review by the CB. Table 4.3, under the heading "Formulants" provides some guidance in evaluating non-active ingredients (inerts) in crop production aids.

Crop Production

4.2 Soil Amendments and Crop Nutrition

Please confirm whether sulphates of magnesium, copper, manganese and cobalt produced using sulphuric acid may be used to correct deficiencies determined by soil or plant tissue testing? (50)

IRON & ZINC Sulphates produced using sulphuric acid are prohibited. The following can be used to correct documented deficiencies for 1) copper - copper sulphate & basic copper sulphate, but only "in a manner that prevents excessive copper accumulation"; 2) magnesium - mined Kieserite, Epsom salts or synthetic magnesium sulphate if not fortified with substances prohibited in the standard; 3) cobalt (not specifically mentioned in 32.311 but covered under the annotation for trace elements) - natural sources that are "unchelated or chelated by substances that are allowed"; 4) manganese - natural sources of manganese oxide and manganese sulphate that are "unchelated or chelated by substances natural sources of that are allowed". Relevant PSL listings in 4.2: Magnesium sulphate, Manganese products, Mined mineral and unprocessed mine minerals, Sulphate of zinc or iron, Trace elements (micronutrients).

Is the end product from an anaerobic digester or biogas digester acceptable for use as a soil amendment? (30)

The products of anaerobic digestion cannot be considered compost under the standard since the definition specifies aerobic decomposition. The product may be used as compost feedstock (see table 4.2, 32.311 "composting feedstocks"). If only manure is used in the digester, the

end product could be applied to fields under the conditions applying to raw manure. If other materials such as abattoir waste were used as raw material, the final product of the digester would still not be acceptable for use on organic soil unless composted.

Can mineral oil be used as a dust suppressant in sulphate of potash? (96)

No. Mineral oil is not listed on the PSL. (see table 4.2, PSL "mined minerals" cannot be processed or fortified with synthetic chemicals).

Does the process described in Table 4.2 of the PSL (annotation for amino acids-non synthetic) apply to other microbial products, for example yeast, for use as a soil amendment? (57.2)

No. There is insufficient justification for applying the annotation specific to the production of amino acids to the production of all microbial products.

Is sugar allowed as a soil amendment? (60.1)

Organic sugar only can be used as a soil amendment. An organic substance does not have to be listed on table 4.2 to be allowed as a soil amendment.

Is tractor exhaust, injected into the soil, acceptable under the standard? (32)

Tractor exhaust may be injected into the soil only if all the components of the tractor exhaust comply with the standard and PSL.

With regard to materials other than livestock manure, are all the materials used to make compost required to be free from toxins, or can it be determined that some or all toxins present in the compost feedstock will break down and be purified during the composting process? (76)

The notes in table 4.2 (32.311) under the headings "Compost obtained from off-farm sources", "Compost produced on the farm" and "Composting Feedstocks" give extensive instruction as to what is required, permitted or prohibited in the production of compost. The underlying assumption is that the composting process is capable of degrading some contaminants that are present in the original material. When materials are used that may contain prohibited substances, it is the responsibility of the operator to document or "prove" the process of degradation. The notation allows for two possible methods; 1) analysis of the final composted material or 2) reference to scientific literature which establishes the common degradation of contaminants during the composting process. In the case of materials obtained from an urban setting, e.g. leaves or yard waste; it should be assumed that persistent chemicals, including pesticides may be present and it would be appropriate to consider the degradation of these contaminants. It is the CB's responsibility to assess the risk and require documentation specific to each situation.

Please outline the application for the use of sulphuric acid under the COS. (98)

Sulphuric acid is specifically prohibited in 32.311 for the manufacturing of substances under 4.2 (gypsum, iron sulphates, zinc sulphates), under 4.3 (pH buffers), under 5.3 (copper sulphates, magnesium sulphates, calcium sulphates and ferrous sulphates), under 6.3 (calcium sulphates, ferrous sulphates and magnesium sulphates) and under 6.6 (calcium sulphates). As a synthetic manufacturing aid, it is also prohibited, although not specifically mentioned, under 4.2 (phosphate rock, aquatic plants and aquatic plant products, mined minerals). Although not specifically mentioned, it is allowed under 4.2 for magnesium sulphate for the production of synthetically produced Epsom salts. Sulphuric acid can be used to adjust the pH of fish products but only if organic vinegar, organic citric, or phosphoric acid are ineffective (Table 4.2 "Fish Products").

Can Potassium Sorbate be used as a preservative in kelp and fish products used as fertilizers? (110a)

Yes. Potassium sorbate can be used as a preservative in kelp and fish fertilizers provided it is from a non-synthetic source. The annotation for Aquatic plants & aquatic plant products and Fish Products in 4.2 states that synthetic preservatives, such as potassium sorbate from potassium hydroxide, are not permitted.

The manufacturer of a fish product soil and plant fertilizer desires to stabilize the product by reducing the pH below 3.5. Is this allowable? (114)

No. Table 4.2 (see "Fish products") states that using acid to achieve a pH level below 3.5 is prohibited

What forms of citric acid may be used as a pH adjuster in fish products? There appears to be a contradiction between tables 4.2 and 4.3 when it comes to the acceptable form of citric acid. (146) There is an apparent contradiction which has been referred to the Organic Technical Committee. Citric acid is permitted under 4.3 'Crop Production Aids' as either synthetic or non-synthetic for use as a pH adjuster. Under 4.2; "Soil Amendments and Crop Nutrition", the annotation for Fish Products requires citric acid if used, to be organic

What documentation is required to substantiate "common degradation of such contaminants during the composting process" as outlined in table 4.2 "composting feedstocks"? (133)

Acceptable documentation would consist of published academic studies. Claims made by manufacturers must be verified by independent research. Operators also have the option of analysis of the final product to confirm that no contaminants persist.

Calcium phosphate is allowed in food processing; can it be used as soil amendment? (140)

Naturally occurring Calcium Phosphate (apatite) is allowed as a soil amendment under table 4.2 "Mined Minerals and Unprocessed Mined Minerals" The annotation outlines certain restrictions, including "acceptable if the substance is not processed or fortified with synthetic chemicals".

Can green char be used in organic agriculture? (Biochar) (139)

Biochar may be considered a form of ash and can be used in organic agriculture as part of the crop nutrient management program provided that the feedstock used is compliant with the annotations for "ash" in 32.311 table 4.2.

Can "meat meal" or meal made from animal products or by-products be used as a soil amendment? (144)

While animal products are listed in table 4.2 under "composting feedstock", they are not allowed as a direct soil amendment except for blood meal, bone meal and feather meal which are allowed. Meat meal is a specific product which under the standard, must be composted before application to the soil.

Can potassium sulphate which has not been mined, but manufactured by combining mined potassium chloride, mined sodium sulphate and water, be used as a soil amendment in accordance with the PSL? (166)

Yes. Potassium sulphate produced from combining two mined minerals is permitted; however, mined minerals may not be processed or fortified with synthetic chemicals except where specifically permitted in the annotation. Potassium sulphates made using reactants such as sulfuric acid or ammonia are prohibited.

Can fertilizers used as soil amendment in organic production be supplemented with synthetic substances? (167a)

If a compliant soil amendment is enhanced or changed using additional substances, those substances must appear on Table 4.2 in order for the resulting soil amendment to be compliant.

What are the requirements for feedstock used to create microbial soil amendments? (167b)

The requirements for feedstock used to create microbial soil amendments are distinct for two separate groups of product; i) microbial products containing no residue of the substrate: for these, the feedstock does not require assessment. ii) product in which the microbial is delivered along with a remnant of the feedstock : here feedstock materials must comply with Table 4.2 - PSL.

If a blended, multi-ingredient soil amendment contains non-organic molasses, can it be used in organic production? (188)

No. If molasses is available in organic form, the use of non-organic molasses would render the product non-compliant with the Standard. The only exception would be when organic molasses is not commercially available.

Does the use of flotation reagents in extraction & purification of mined minerals render the product prohibited? Is a producer required to demonstrate the absence of flotation reagents in the final product? (189)

Minerals which have been extracted using flotation reagents that are not intended to form part of the mineral substance are allowed. Given that flotation reagents are removed and reused by the mining industry, the operator is not required to prove the purity of the final product.

4.3 Crop Production Aids and Materials

Can insecticidal soaps that contain isopropyl alcohol, in addition to the fatty acids derived from animal or vegetable oils, be used in organic production? (75)

Yes, insecticidal soaps containing isopropyl alcohol can be used since isopropyl alcohol (1-Propanol) is a formulant (as per 32.311 - 4.3) and is listed in 4b of PMRA.

Under the Canadian Standards for Organic products it is listed that water is permissible. Can you please tell me if Seawater would be included in this definition? (23)

Table 4.3 of the PSL allows for water (and wetting agents) to be used as crop production aids. Sea water, in all its various forms of concentration, is acceptable.

Is the use of ethylene as a sprout inhibitor for onions and potatoes admissible? (43)

No. The use of ethylene in this context is clearly as a growth regulator prohibited in 4.3

Is clove oil allowed as an organic sprout inhibitor for potatoes? (27)

Table 4.3 of the PSL lists "plant extracts, oils and preparations" as acceptable crop production aids. Clove oil would be acceptable for use on seed potatoes.

Can chlorine be used to wash organic produce? (5)

Chlorinated water, up to the concentration used in the closest municipal water system, is acceptable for washing organic vegetables and does not require rinsing.

Are non-synthetic formulants allowed in fertilizer formulations? (53.1)

Non synthetic formulants may be used in fertilizer formulations providing section 1.4.1 is adhered to.

If citric acid is permitted, is sodium citrate also permitted? (66)

No. Citric acid and sodium citrate are different substances.

Is the delivery of pheromones confined to passive dispensers or is spray application allowed? (93)

Yes the "Origin and Usage" annotation for pheromones limits the delivery to traps or passive dispensers. Spray applications are prohibited.

Can plant oils / plant extracts based herbicides contain PMRA list 4 A and 4 B formulants? (51)

Yes, the formulants listed in PMRA 4A and 4B can be used. These two categories meet the basic organic principles and thus would be acceptable as there is no specific list in the PSL for formulants See table 4.3.

Can you clarify the requirement for removal of plastic mulch from fields? (44)

The annotation for plastic mulches, in table 4.3 PSL, is clearly intended to prohibit the incorporation into the soil for any material other than fully biodegradable films compliant with section 1.4.1 (32.310). Where there is any risk of contamination, plastic mulch must be removed from the soil. The distinction between annual and perennial crops is made on the premise that following an annual crop, tillage will occur in preparation for the next year, but this distinction is not essential to fulfilling the intent of the standard, which is to avoid contamination of the soil. In situations where the mulch will not be incorporated into the soil then it may be left on.

Are bioplastic mulches, made from corn, accepted as "fully biodegradable films" as the term is used in the annotation for mulches, table 4.3 of PSL? (79)

A bioplastic mulch could be accepted as fully biodegradable provided that;

- 1) The mulch is not made using GMO plant material;
- 2) There are no substances prohibited under 1.4.1 present.

Does the listing of "fully biodegradable films" in table 4.3 PSL under mulches include films made from petroleum products? (60.2)

No. Mulches made using petroleum are not considered to be "fully biodegradable" and must be removed from the field and may not be incorporated into the soil.

Is copper sulphate allowed as a treatment for fence-posts on pasture? (9)

The use of copper sulphate is permitted for use as a fungicide (wood preservative) for wood (e.g. fence posts) on organic production units (Table 4.3 copper products).

If fatty acids are allowed in organic production systems as a pesticide (PSL 4.3), are fatty acids allowable in fish and aquatic plant products used as organic fertilizers? (110b)

Fatty acids from plant and animal sources are allowed in fish and aquatic plant products used as organic fertilizers. They are not allowed if they are from synthetic sources, such as fatty acids extracted using hexane. For a synthetic to be allowed as an ingredient in an organic fertilizer, the substance must be included on the PSL Table 4.2.

Can a pesticide and a fertilizer be combined under the COR? (110c)

Yes. An operator wishing to use a pesticide in a fertilizer formulation must ensure that the requirements of 32.310 5.6.1 and 5.6.2 are fulfilled. Pest control substances listed on the PSL 4.3 can only be used when other cultural approaches fail and require the documented presence of the pest organism. Fertilizer applications must be applied according to plant's requirements based upon the plant's growth stage.

Can PVC tubing be used as structural material to hold insect nets? (136)

Yes. PVC tubing may be used. The prohibition of poly vinyl chloride for mulches and row covers does not apply to the structural material that would be used to suspend the row cover.

May a bacteria for use as an organic crop production aid, be produced using prohibited materials in the substrate? (141)

Table 4.3 allows the use of "biological organisms", which includes bacteria, providing they are not genetically modified. The annotation accompanying "biological organisms" does not restrict or regulate the medium in which these organisms are grown.

Can acetic acid solution be used as a weed control product in organic production? (172)

Yes - In a previous version of the PSL, acetic acid appeared as a substance for use in weed control with the annotation "non synthetic sources unless commercially unavailable". During a subsequent blending of several tables it was dropped. The use of acetic acid for weed control is not contrary to organic principles, but to date no commercial products have been registered for use by PMRA (Pest Management Regulatory Agency) within crops.

If paper containers are placed in the ground as transplant containers and allowed to decompose, what are the requirements for the paper? (187)

The requirements are the same as for mulch. No glossy paper or coloured ink.

Livestock Production

5.2 Feed, Feed Additives and Feed Supplements

Does the prohibition of sulphates produced with sulphuric acid apply to cobalt sulphate used as a mineral supplement and for medical use? (22.1)

No. Table 5.2 of the PSL allows for Trace elements from any source for feed. Table 5.3 allows them from any source for medical use.

Is the use of fish products as feed supplements prohibited? (22.2)

Table 5.2 of the PSL allows for protein feeds from organic sources. Fish products would thus not be permitted as feed supplements unless organic.

Is the use of DL-methionine from processes involving Genetic Modification allowed? (54)

No. Table 5.2 of the PSL allows for the use of DL-synthetic Methionine, as a special exception subject to a review by the CGSB technical committee. Section 1.4.1 prohibits products from genetic engineering.

Does the annotation applying to Amino Acids (non-synthetic) in table 4.2 of the PSL also apply to Amino Acids in table 5.2? (59)

Yes. The annotation for amino acids in table 4.2 PSL (soil amendments) should be considered to be applicable also to table 5.2 (animal feed additives and food supplements) as it explains more fully the definition of "non-synthetic" for the purpose of the Standards.

If vitamin and mineral premixes that do not contain preservatives are unavailable, how can organic farmers meet the nutritional needs of their animals? (65.2)

The listing of premixes in table 5.2 (PSL) and vitamins and trace minerals in table 5.3 (PSL) with the accompanying annotations makes it permissible to use pre-mixes that are not fully compliant with the standard, if no fully compliant product is available. See section 3 "Definitions": "Commercially Available."

Is L-Lysine allowed in the feed for organic birds? (80)

Yes. Table 5.2 allows for the use of non-synthetic amino acids such as L-Lysine. L-lysine is terminology which does not distinguish whether the substance is synthetic or not. Synthetic lysine, such as L-Lysine HCL, is not permitted.

Is a yeast derived protein included under the definition of micro-organisms and yeasts in section 5.2 of the PSL? (120)

A yeast derived protein is not a yeast; it is a protein. Protein for use in organic livestock rations must be in compliance with section 6.4.4.(32.310) Protein derived from organic yeast could be compliant with the Standard, depending on the method of fractionation.

Can acetic acid be used for acidifying drinking water for animals? (201)

If the acetic acid is intended to lower the pH, this is acceptable providing the resulting water falls within Health Canada's Guidelines for Drinking Water: pH 6.5 to 8.5.

5.3 Health Care Products and Production Aids

Can a vitamin, containing a synthetic preservative be used in livestock feed? (81)

Yes, providing there are no commercially available, fully compliant alternatives. The listing of premixes in table 5.2 (PSL) and vitamins and trace minerals in table 5.3 (PSL) with the accompanying annotations makes it permissible to use pre-mixes that are not fully compliant with the standard, if no fully compliant product is available.

Is it acceptable to inject meat animals with vitamin B for the purpose of improving meat color? (33)

No. Table 5.3 lists vitamins for "enrichment or fortification." Injection to improve the colour of meat is for cosmetic purposes, not enrichment or fortification.

Can uncertified garlic be used as a de-wormer in organic livestock operations? (7)

This standard permits the use of uncertified garlic as a de-wormer under section 5.3 of the PSL, Botanical compounds.

Is Lanolin allowed for use on dairy cows teats? (55)

Yes. Lanolin is listed on the elaboration of Health Care Products and Production Aids list published on the CFIA-COO website.

Can ink be used to label organic eggs? (46)

Yes. Ink that does not contain prohibited substances may be used to label egg shells.

Is Citrus extract allowed as a cleaner or disinfectant in buildings for animal production? (68.1)

Yes. Citrus extract, included under botanical compounds in 5.3 (32.311) would be useable as a cleaner in livestock houses.

What is the status of tables 7.3 and 7.4 regarding livestock production? (68.2)

Substances on Tables 7.3 and 7.4 can be used in livestock facilities but cleaning or disinfection of livestock facilities is not confined to these lists. See also 5.3 PSL . and 6.8.4 - 32.310.

Processing

Which forms of lecithin are acceptable, according to the organic standard? (14)

The current standard should be interpreted to allow organic lecithin both bleached and unbleached, and non organic where organic is not commercially available. Non organic lecithin must still comply with 1.4.1 (Reference, PSL 6.3).

Since lactic acid is mentioned twice in table 6.3, once under "Acids" with no designation of specific use and again under "Lactic acid", with a clear single use, are operators bound to the second specific use or allowed to use this substance more widely? (47)

The wider use is acceptable as it is listed under acids with no annotation. Neither of the listing in 6.3 fix the use of the substance lactic acid; the annotation accompanying lactic acid is intended to give examples, not exclude other food uses.

Are nitrates forbidden in all processed foods? Is it possible to produce organic bacon? (56)

The addition of nitrates for curing is not allowed in processed organic foods. There is presently a request from industry to allow the use of a natural source of nitrite or nitrate (e.g.celery powder).

Can products not listed on the PSL be used as "indirect processing aids"? (e.g. – mineral oil on cutter/slicer blades) (61)

Agricultural products not on the PSL can only be used as processing aids if they are organic. Non-agricultural products must be on the PSL.

Are there acceptable alternatives to gelatin, such as seaweed and plant derived hypromellose? (118)

Plant substances such as seaweed extracts are acceptable alternatives to animal-derived gelatine. Hypromellose is a synthetic, non-agricultural substance and therefore cannot be used because it is not specifically included in the PSL.

For cheese production, can we use chymosin in a salt brine solution with sodium benzoate added as a preservative? (151)

Chymosin produced by genetically modified micro-organisms is prohibited as per 1.4.1 a. Chymosin extracted from calf stomach linings is permitted and should be from an organic

source when commercially available (refer to 'enzyme' listing in PSL 6.4). According to 8.2 & 8.2.7 of 32.310 only preservatives listed in Section 6 of 32.311 can be used. As sodium benzoate is not listed on the PSL, allowed chymosin products may not be preserved with sodium benzoate.

Can a coloured wax containing paraffin waxes (hydrocarbon or microcrystalline wax) and a colouring agent be used to coat organic cheese? (154)

No. Wax may be considered a component of the aging and processing of the final product. Therefore wax as listed in table 6.4 and 6.6 must be non-synthetic only: a) carnauba wax and b) wood resin (processing product of resin component)". The requirements for colouring agents are ; "from non-synthetic sources only and shall not be produced using synthetic solvents and carrier systems or any artificial preservative".

Can the ingredient "cultured celery powder" be used as a source of nitrite? (153)

Yes. If the cultured celery powder is organic, it may be used as a source of nitrite in the curing of organic meat.

Can stevia be used as a sweetener in organic products? Is non-organic stevia admissible under the 5% non-organic ingredients rule? (171)

Stevia is a plant product which can be used in the manufacture of organic products. As stevia is commercially available in organic form, this form must be used.

Does the Standard require that processing aids in the production of non-organic ingredients be listed on Table 6.6 PSL? (20a)

No. The processing aids used by manufacturers of these ingredients are not subject to the scrutiny of Certification Bodies.

Can the mineral salts of ascorbic acid (calcium ascorbate and sodium ascorbate) be used as food additives (Table 6.3)? (163)

No. Ascorbates are not the same substance as ascorbic acid, and therefore cannot be used unless Table 6.3 of the PSL is revised to include them.

Is the use of bone char allowed in the processing of organic sugar? (192)

No. Although bone char is a form of 'Activated charcoal', it is not allowed because it is not from plant sources as required in Table 6.6 of the PSL.

Cleaners, Disinfectants and Sanitizer

In a facility where both non- organic and organic food is processed, can cleaners not listed in 7.3 or 7.4 be used immediately prior to the processing of the organic product? (91)

Yes – However, the use of cleaners not listed in tables 7.3 or 7.4 (PSL) is permitted under specific conditions laid out in 8.3.8 and 8.3.10 (32.310): 1) the cleaning procedure is deemed necessary; 2) that it is done before each organic run; 3) the cleaning materials used are effectively removed from the food contact surfaces and that process documented; 4) the disposal of the cleaning product has minimal environmental impact.

Do clauses 7.3 and 7.4 apply to the cleaning of: dedicated and non dedicated spraying equipment; of irrigation systems; and non-food contact surfaces such as floors, windows, staff toilets etc.? (21.1)

The restrictions on cleaners, disinfectants and sanitizers provided in the PSL do not apply to parts of the facility where there is no direct or indirect contact with the food products or food contact surfaces (Reference, PSL Tables 7.3 and 7.4). Tables 7.3 and 7.4 of the Permitted Substances List generally apply to food contact surfaces, food, and equipment in contact with

food, unless otherwise annotated. While the cleaners listed in these tables may be used in other applications, cleaning of non-food contact surfaces is not restricted to these cleaners. In the case of use of substances not listed in 7.3 & 7.4, the operator is responsible to ensure that no residual contamination occurs on land and crops.

Are approved cleaners applicable only to food contact surfaces or to the whole processing facility? (10)

The restrictions on cleaners, disinfectants and sanitizers provided in the PSL do not apply to parts of the facility where there is no direct or indirect contact with the food products or food contact surfaces (Reference, PSL Tables 7.3 and 7.4).

Must formulants contained in commercial cleaning products be listed on 7.3 and 7.4, or only the active ingredients? (55.1)

Only ingredients as listed on the MSDS for cleaning products need to be verified against the PSL. (Tables 7.3 & 7.4).