

Principles (CAN/CGSB-32.310) Amendments with Impacts

By Rochelle Eisen

The following article only focuses on amendments to the 2006 version of CAN/CGSB-32.310 that growers should be aware of, and does not discuss each requirement to its fullest, just the changes.

Be sure to read the Dear Rochelle column on Page 5 for an overall perspective. There is also a second part to this article "PSL Amendments with Impacts." Also required reading is the "Clarification and Guidance for the transition to the new organic standard in British Columbia for CBs accredited by COABC" article on Page 6, so it is clear to you when you need to be in compliance with these amendments.

Principles - Scope (Section 1)

One of the most common questions is what products are covered by the scope of this standard? Para 1.2 specifies that only those products that have production rules in the standard may be certified under the Canada Organic Regime (COR). For now that is restricted to Agricultural crops, Domesticated Livestock (inclusive of poultry, ratites, bison, fallow deer, etc.), Apiculture and Bee products, Maple products, Mushrooms, Sprouts, Greenhouse Crops, Wild Plant Crops. This section includes the associated processed foodstuffs for humans, as well as livestock feed and other products used by livestock.

As there are no production rules for aquaculture (a possible work in progress), cosmetics, forest products or textiles, these products fall outside the scope of the standard until further notice, but are subject to the *Consumer Packaging and Labelling Act* (truth in advertising legislation).

A prohibition has been added for cloned farm animals and their descendants (para 1.4.1.k). This means a producer will need to know the lineage of any non-organic animal brought under organic management.

Principles - Crop Production (Section 5)

An incredible amount of time was spent trying to clarify the manure source standard (para 5.5.1) so that it worked for everyone – kudos to the Crop Working Group for persisting. The revised version prohibits manure from confined livestock operations, such as crated veal operations and hog barns where farrowing crates are used. It does not include caged poultry as long as they can completely turn around in the cage. It also prohibits manure from livestock operations where animals are kept permanently in the dark. The only other criterion is that there is enough information kept on record to affirm compliance of the source to this standard.

A very useful informative note was added to the manure source requirements suggesting that it would be best if manure did not come from landless operations, or from livestock operations that use GMO feeds. At first glance you might think that this is not an outright prohibition of high risk GMO containing manures, but don't forget the overriding 1.4.1 paragraph which prohibits the use of "materials and products produced from genetic engineering". There is no outright prohibition of these manures, but you must make sure you are not contaminating your farm. This means these manures must be properly hot composted as the heat in the piles renders down transgenic material. For more insights into this topic refer to my notes on the PSL annotation for compost feedstocks in the PSL Amendment article and also refer to the Hot Compost/DNA sidebar [above].

Principles - Livestock Production (Section 6)

Whatever you do, take my advice and do not refer to the 2006 version at all when reading these changes, as the livestock section has had a major rewrite and

reorganization and very few of the paragraph numbers in the 2009 version align with the original 2006 version, so if you haven't downloaded or received your 2009 version, read the concepts and don't fret the referenced section numbers.

Clarification was added to the livestock pasture requirement for herbivores in Para 6.1.3 making it clear that herbivores must have access to pasture during the grazing season and access to the open air at all other times as weather dictates. Exceptions are identified in paragraph 6.8 "Livestock Living Conditions" (see this discussion further on), and as in the previous version it is clear that you may confine livestock when field conditions are sub-par and animal activity would be harmful to the farm (para 6.8.2.d) and surrounding ecosystem. One key new addition in paragraph 6.1.3 is that sexually mature herbivores must be able to graze 30% of their total forage intake during the grazing season. Minimum grazing densities are also outlined in paragraph 6.1.3.a, so be sure to look at this closely as it says: "On all farms a minimum of 0.13 ha (1/3 acre) per animal unit must be devoted to grazing. (One animal unit = one cow or one bull or two calves (each 225 to 500 kg) or five calves (each less than 225 kg) or four ewes and their lambs or six does and their kids)."

As it is currently impossible to purchase antibiotic-free vaccines, the antibiotic-free criteria was removed in paragraph 6.2.2.c.i and will remain so until such time when antibiotic-free vaccines are available. To be clear, the amount of antibiotic in a vaccine is miniscule and its sole purpose is to act as a preservative. As far as I can see, this was the only place in the standard where the antibiotic-free vaccine requirement was specifically made, and therefore this is the only place it had to be amended.

Generally, we all know if organic feed cannot be sourced in sufficient quantity and type to provide a balanced ration suited to the type of livestock, the livestock cannot be considered organic, but a 10 con-

Raw Manure



If incorporated into the soil 90 or 120 days before harvest, raw compliant manure in either solid or liquid form can be used (para 5.5.2.5). The interval period is determined in the following manner. If the crop comes into contact with the soil, the application must be done 120 days before harvest (e.g. lettuce, potatoes, and strawberries). If the crop never comes into contact with the soil (e.g. tree fruit, cane fruit), only a 90-day interval is needed.

Hot Compost / DNA

- ⑤ **GM DNA can be found in most manure no matter if the source is organic or not**
- ⑤ **GM DNA can be found in vermicomposting**
- ⑤ **GM DNA was not found in cattle manure that was collected directly from the cow and then hot composted for four months**
- ⑤ **GM DNA was found in hot composted layer manure contaminated by feed**

Conclusion: Effective hot composting of manures for at least four months can degrade GM DNA, but it is critical the manure is not contaminated with intact seeds or grain.

**Other Online Hot Compost / DNA resources:
The Fate of the Recombinant DNA in Corn during Composting:**

www.informaworld.com/smpp/content~content=a713730964~db=all

Does composting degrade modified DNA?
http://oacc.info/DOCs/compost_mclean.pdf

1 Martin, R.C. Van Acker, R. And McLean, N. 2005. Identified Risks in Canada of Co-existence between GMO non-GMO Farm Systems. 1st Annual Congress of the Quality Low Input Food Project: ORGANIC FARMING FOOD QUALITY AND HEALTH, University of Newcastle upon Tyne, UK. January, 2005

secutive day derogation (para 6.4.1) has been added to accommodate for “a local farm scale catastrophic event (such as fire, flood, or extreme climatic conditions).” If organic feed is unobtainable during this type of farm crisis, feed from transitional land and known to be free of substances prohibited by paragraph 1.4.1 can be fed for 10 consecutive days.

New paragraph 6.4.4.j prohibits synthetic colouring agents in livestock feed and paragraph 6.4.6 prohibits the force feeding of water fowl. A great deal of work was done reorganizing parts of section 6.7 Livestock Health Care to help differentiate how dairy versus meat animals may be treated when ill. As this has seemed confusing up to now, I am going to review components of this section, even though there are no significant changes since the 2006 version except the minimum withdrawal when using antibiotics on dairy animals has been upped to 30 days from 14 days (para 6.7.6.d).

Dairy animal emergency treatment is mostly outlined in paragraph 6.7.6.d. It says emergency antibiotic treatments are permitted only with written instructions from a veterinarian (subpart i) with the following caveats: minimum withdrawal of 30 or twice the label specification whichever is longer (subpart ii); use must be documented (subpart iii); and, chronic animals requiring repeated treatment need to be culled (subpart v). The most complicated standard is subpart 6.7.6.d.iv which stipulates any dairy cow that is treated more than two times during any 12 month period with any combination of antibiotics or parasiticides (anthelmintics) has to undergo a 12-month transition before milk can be organic. This allows either two treatments of parasiticides per year or two treatments of antibiotic per year or one treatment of each per year.

The key point is that the same antibiotic derogation does not extend to meat animals (para 6.7.8). It is also important to realize that there is no allowance for hormonal treatments for meat animals (para 6.7.7) except for oxytocin as outlined in the PSL (for details read page 17). To help keep parasite loads in check, there must be sound pasture practices and fecal count monitoring done (para 6.7.9.a). Also worthy of note is the inclusion of a derogation for parasiticides (anthelmintics) on meat animals in para 6.7.9.b. But before you can evoke the derogation there must be evidence of parasite infection (para 6.7.9.b.i); written instructions from a veterinarian (para 6.7.9.b.ii); and a plan to avoid similar situations (para 6.7.9.b.vi). If you do use a parasticide on a meat animal, double

the label withdrawal is required before the meat can be marketed as organic (para 6.7.9.b.iii); and, most importantly, there can only be one treatment on animals less than a year old, and a limit of two per year for older animals (para 6.7.9.b.iv).

A derogation (para 6.8.1.g) has been inserted for bedding straw but only for animals that do not tend to eat it. In this situation, as long the straw has not been exposed to any prohibited item listed in 1.4.1 for 60 days prior to being harvested, this straw can be used as bedding for these animals.

Regarding Livestock Living Conditions, you may limit access when conditions outside would negatively affect the welfare (para 6.8.2.c) of the animals such in the case for young birds until fully feathered, or young herbivores till they build their immune systems. In fact, paragraph 6.8.10.3 stipulates that all dairy replacement calves over nine months of age shall have access to pasture. Breeding bulls are the complete exemption and they can always be confined (para 6.8.7.a), while paragraph 6.8.7.b sets the minimum space permitted for the finishing phase for cattle at 23 sq. meters/animal. Paragraph 6.8.8 determines the indoor and outdoor space for cattle (cows and calves); paragraph 6.8.9 does the same for sheep and goats; paragraph 6.8.11.2 for poul-

try; paragraph 6.8.12.2 for rabbits; and, paragraph 6.8.13.3 for pigs.

It seems poultry densities will be on some future work list to be reviewed, but this may not happen for quite some time. If you do have any constructive ideas or comments on what could work for a standard don't hesitate to contact your CB or myself, so that this information can be added to an official petition to get this standard reviewed and possibly amended. Until this is resolved, negatively impacted producers who disagree with the current version would have to submit their case in writing to their CBs for consideration, addressing each aspect of the standard. Each CB will have to decide if they can justify an exemption to the requirements, record their decision and review the situation annually.

Paragraph 6.8.10.1.d is a new addition requiring that only outdoor hutches with access to an enclosed yard or run are acceptable for calves. This is a definite change from the previous version, while paragraph 6.8.11.1.a clarifies that it is row/battery cages for poultry that is prohibited (the 2006 version just said cages).

I know there maybe a lot more questions regarding livestock requirements in light of these amendments. I am willing to explore reconvening the livestock producer committee to review the amended standard, but only if impacted producers feel it's absolutely necessary. Please do get in touch if you have concerns.

Specific Production Requirements (Section 7)

No notable changes in the Apiculture (7.1), Maple Syrup (7.2), Mushrooms (7.3), Greenhouse Crops Production (7.5), or the Wild Crops (7.6) standards.

There are a few points worthy of mention regarding Sprout Production (7.4). Water analysis must be conducted once every six months (para 7.4.3); rinse water cannot contain soluble fertilizer (para 7.4.4); if a growing media is used, it must conform to the standard (para 7.4.5); only food contact cleaning substances identified in section 7.3 of the PSL may come into contact with seeds or sprouts (para 7.4.6).

Principles - Processing (Section 8)

The numbering has been changed around in this section, so don't refer to your 2006 version as it won't

align in all cases with the referenced paragraph numbers given here.

Ingredients/Food Additives and Processing Aids

In the 2006 version, there was a requirement that all agriculture ingredients in a 95% and above product had to be organic; this requirement has been excised. Now non-organic agricultural ingredients are allowed but only within the 5% non-organic margin and only if not available in the equivalent organic form (para 8.2.3) and cost cannot be a consideration. For example, if you use a ground meal of some type in your recipe, but it is only commercially available in its whole form then you can purchase the non-organic meal if it and the other non-organic ingredients constitute less than 5% of the product makeup. But you must be able to substantiate that any of these non-organic agriculture ingredients used (para 8.2.6) are not genetically engineered, been exposed to ionizing radiation, or derived from cloned animals. Availability must be reviewed annually.

Some other considerations to keep in mind: any non-agriculture ingredient used within the 5% limit must be listed in the PSL (para 8.2.7), and similarly either your processing aids (e.g. bentonite, casein) must be organic or listed in section 6.6 of the PSL (para 8.3.3). If you use a processing aid listed in the PSL you must also confirm that they are not genetically engineered, been exposed to ionizing radiation, or derived from cloned animals.

Cleaning

There has been a change in cleaning requirements as the committee recognized that rinsing is not always practical, so two approaches were provided.

If a cleaning product comes into direct contact with organic food or food contact surfaces (para 8.3.7) and you don't want to rinse or purge, you are restricted to those cleaning products listed in PSL section 7.3 and restricted by the notations as outlined.

Subsequently paragraph 8.3.8 outlines that cleaning products listed in PSL section 7.4 can be used to clean, disinfect or sanitize organic food contact surfaces and anything else in the plant you would like to clean except the food itself. You must be sure to remove the cleaning product from the food contact surface before food comes into contact with it. This means in some cases that evaporation, or drying off

the surface can assure there is no residue. In the situation where there maybe residuals, rinsing with potable water is the most appropriate action. It is important to take a close look at PSL section 7.3, as there are only a handful of cleaning products that can come into direct contact with organic food including non-synthetic acetic acid (vinegar – organic or non-organic), citric acid and hydrogen peroxide. Cleaning products that don't have to be removed from food contact surfaces include those previously mentioned plus synthetic acetic acid, isopropyl alcohol, ascorbic acid, peracetic acid, potassium bicarbonate and sodium bicarbonate.

PSL 7.4 has a slightly different focus. It covers all cleaning products that can be used on anything excluding food but if used on organic food contact surfaces they must be rinsed off with potable water. Basically, you cannot wash organic fruit and vegetables with soap and rinse it off and be in compliance with this standard. For complete details refer to the Section 7 – Permitted Substances Lists For Cleaners, Disinfectants, And Sanitizers review in the PSL Amendment article on Page 18.

Pest Control

As before, an operator must employ good manufacturing practices (para 8.4.1) such as eliminating pest habitat and food opportunities, establishing effective exclusion methods, using mechanical traps and lures and allowed repellants. If good manufacturing practices are not effective, operators can use pest control substances listed in section 6.7 of the PSL (para 8.4.2).

What is completely new is para 8.4.3, which says if the above is not effective, you may use pest control substances not listed in PSL on the exterior of your facility, but you must make sure there is no contact with organic products, and the use documented.

Paragraph 8.4.4 is not really new but it clarifies that organic products cannot be exposed to pest control products not allowed in this standard during any phase of production, transfer, storage or border crossing.

A complete rewrite was done on section 9 **Emergency Pest Or Disease Treatment** in the hopes of clarity. In the situation where any government program is doing widespread treatment of pests (gypsy moth, noxious weeds) or diseases (West Nile virus, Avian Influenza) with materials prohibited in this standard,

operators must inform their CB. Organic products exposed to these prohibited materials may lose their organic status and a transition period maybe required. This is all it outlines in the standard for emergency exposure, but the hope is that the CB will complete a risk analysis of the situation to assess how extreme is the contamination. If the risk of contamination is low (e.g. the Spinosad formulation used was not compliant) maybe only this exposed crop in the particular field needs to lose status. If the exposure was more severe a transition period for the impacted land can be imposed.

Livestock animals exposed to mandatory treatment cannot be sold as slaughterstock or as organic breeding stock as per paragraph 6.7, but can be kept in the herd. As long as the exposure occurred in the first two trimesters and these treated animals continued to be raised according to the standard, offspring of these treated animals will qualify as organic slaughterstock.

Requirements for Adding or Amending Substances in Can/CGSB-32.311 Organic Production Systems

Section 10 is now Requirements for Adding or Amending Substances in Can/CGSB-32.311 Organic Production Systems - Permitted Substance List. These requirements used to be in Section 11, while Section 10 dealt with labelling, but as all labelling information has to be in the Organic Production Regulation, all references to labelling have been removed from the standard.

I am not going to review the requirements for adding or amending a substance, but am happy to respond to questions about this section anytime. And if you want to petition for the addition, amendment or even deletion of a substance, I will be happy to assist. Each CB will also have the paperwork for this process, and remember there already exists a large backlog of submissions yet to be dealt with, so there is a possibility anything raised at this point may take at least a year to get to the table for discussion.

You can contact Rochelle Eisen, Organic Extension Agent at 250.547.6573 or by email at extension@certifiedorganic.bc.ca.