



# Compost Requirements in Organic Production

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**Pro-Cert Organic Systems Ltd.**

*Celebrating 20 years of Service!*

# Compost Requirements in Organic Production

- Who is Pro-Cert?
- Compost Requirements Under the National Standard of Canada and USDA National Organic Program (NOP)
- Can City Compost be Approved for Use in Organic Production?



# Who is Pro-Cert?

- Pro-Cert is the largest Canadian Organic Certifier with over 1700 certified clients (producers and processors) in Canada and the United-States.
- Pro-Cert is owned by the Wallace Hamm family located near Saskatoon, Saskatchewan. The Hamms are also a producer of organic crops such as wheat, alfalfa, peas, oats and flax.
- Pro-Cert operates out of two offices: Head Office in Saskatoon, Saskatchewan and an Eastern Branch Office in Cambray, Ontario.
- Pro-Cert is celebrating 20 years of Organic Service.



# Who is Pro-Cert?

Pro-Cert is Accredited to certify operators to the following Standards and Regulations:

- the National Standard of Canada and Product Regulations;
- the EC Regulation 834/07 and 889/08;
- the USDA National Organic Program;
- the Quebec Organic Reference Standards;
- MAFF Japanese Regulations (JAS) (New in 2010).



# Compost Requirements Under the National Standard of Canada

Compost requirements are clearly defined in the Permitted Substances List CAN/CGSB 32.311.

**The following *composting feedstocks* are permitted:**

- Animal Manure (conforming with the standards);
- Animal, animal products and by-products (including fishery). RESTRICTED;
- Plants, and plants by-products (including forestry and source-separated yard debris, such as grass clippings and leaves).



# Compost Requirements Under the National Standard of Canada

## HOWEVER!:

- Except for animal manures, feedstock 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.
- Prohibited substances under 1.4.1 includes: GMO's, synthetic pesticides not listed as permitted, fertilizers not listed as permitted, sewage sludge, synthetic growth regulators, synthetic drugs and antibiotics, synthetic food additives and processing aids, cloned animals and products from nanotechnology.



# Compost Requirements Under the National Standard of Canada

Specific **prohibited** composting feedstock include:

- Sewage sludge;
- Compost Starter;
- Feedstock fortified with substances not included in the standards or prohibited under 1.4.1. ;
- Leather by-products;
- Glossy paper, waxed cardboard, paper containing coloured ink (includes city yard grass/leaf paper bags);
- Animal, animal products and animal by-products that are not guaranteed free of risk of risk material such as skull, brain, trigeminal ganglia, eyes, tonsils, spinal cord and dorsal root ganglia of cattle over 30 months and the distal ileum of all cattle.



# Compost Requirements Under the National Standard of Canada

Compost produced off-farm must comply with the following:

- Shall not exceed the maximum acceptable levels of trace contaminants and foreign matter outlined for unrestricted use (Category A) compost as specified in the Canadian Council of Ministers of the Environment (CCME) publication *Guidelines for Compost Quality*;
- Shall not cause a buildup of heavy metals in soil over repeated applications;
- Shall meet the criteria for acceptable levels of human pathogens as specified in the CCME publication *Guidelines for Compost Quality*.



# Compost Requirements Under the National Standard of Canada

## What is Category A compost?

- Compost that can be used in any applications such as agricultural lands, residential gardens, horticultural operations, the nursery industry, and other businesses
- Compost which contains Fecal Coliforms under 1000 (MPN)/g and No Salmonella sp. With detection level under 3 MPN/4g.

Table 1 Concentrations of Trace Elements in Compost and Cumulative Trace Element Additions to Soil

Trace Elements***	CATEGORY A	CATEGORY B	
	Maximum Concentration within Product (mg/kg dry weight)	Maximum Concentration within Product* (mg/kg dry weight)	Maximum Cumulative Additions to Soil* (kg/ha)
<i>Essential or beneficial to plants or animals</i>			
Arsenic (As)	13	75	15
Cobalt (Co)	34	150	30
Chromium (Cr)	210	**	**
Copper (Cu)	400	**	**
Molybdenum (Mo)	5	20	4
Nickel (Ni)	62	180	36
Selenium (Se)	2	14	2.8
Zinc (Zn)	700	1850	370
<i>Other</i>			
Cadmium (Cd)	3	20	4
Mercury (Hg)	0.8	5	1
Lead (Pb)	150	500	100



# Compost Requirements Under the USDA National Organic Program (NOP)

## Comparison with the USDA-NOP requirements:

- Similar requirements on prohibited substances.
- Focus on the composting process;
  - Establish an initial C:N ratio of between 25:1 and 40:1;
  - Maintain a temperature of between 131 F and 170 F for 15 days for windrow composting (must be turned 5 times) or 3 days using in-vessel or static aerated pile system.



# Compost Requirements Under the USDA National Organic Program (NOP)

- “Compost” not meeting the composting requirements cannot be considered as compost.
- “Compost” not meeting the composting requirement may be considered as raw manure (120 day and 90 day restrictions) or uncomposted plant materials.



# Can City Compost be Approved for Use in USDA NOP Organic Production?

According to Miles McEvoy, Deputy Administrator of the USDA-NOP, November 9, 2009:

- 3 municipal waste composts found with bifenthrin residues exceeding EPA tolerance for many crops.
- NOP has drafted a policy that would set a UREC (unavoidable residual environmental contamination) level of 5% of the lowest EPA tolerance level established for the pesticide detected.

However, NOP Section 205.203 states *“the producer must not use: (1) Any fertilizer or composted plant and animal material that contains a synthetic substance not included on the National List of synthetic substances allowed for use in organic crop production”*



# Can City Compost be Approved for Use in Canadian Organic Production?

City Compost can be approved for use if:

- Only approved composting feedstocks are used (no paper bags with coloured ink, no sewage sludge, no restricted animal by-products,...);
- The source of the composting feedstock can be documented to confirm the absence of prohibited substances and compliance to the acceptable feedstocks requirements.
- Category A requirements are met.



# Can City Compost be Approved for Use in Canadian Organic Production?

## QUESTION:

- Can the absence of prohibited substances be tested?
- Can the common degradation of contaminants during the composting process be documented?

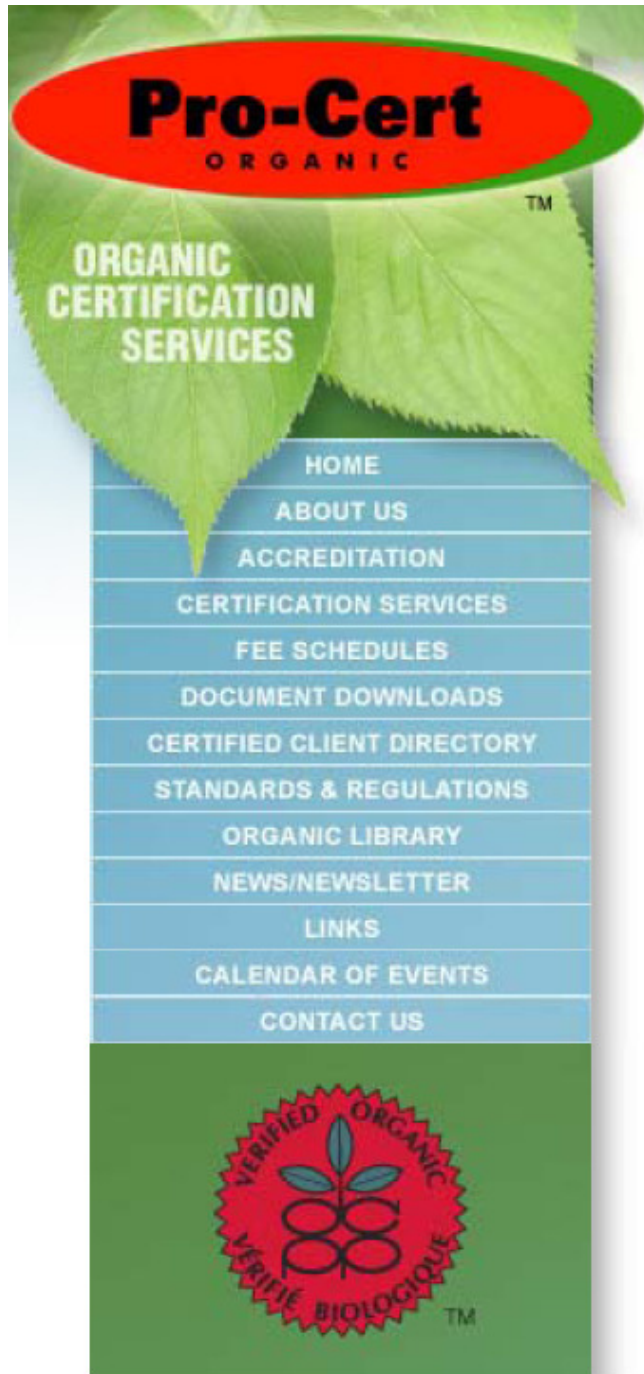


# Organic Certification

## General Process for certification:

- Submit application (Organic System Plan)
- Preliminary evaluation
- Inspection
- Evaluation
- Certification Decision
- Surveillance





# Compost Requirements in Organic Production

For Questions about Organic Certification in

Eastern North America

please contact:

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