



# Transform Compost Products

healthy soil, healthy future

## Soil Conditioner Verification Process

December 2023

Transform’s soil conditioner is produced according to the requirements specified by the Canadian General Standards Board Document CAN/CGSB-32.311-2020 Amended March 2021 – Organic Production Systems Permitted Substances Lists. The requirements also refer and comply with CAN/CGSB-32.310 2020 – General Principles and Management Standards; and the CCME Guidelines for Compost Quality.

Table 4.2 in CAN/CGSB-32.311 identifies the requirements for Compost from off farm sources:

*“Compost obtained from off-farm sources shall conform to the criteria specified in Table 4.2 Compost feedstocks. If compost is obtained from another farm, feedstock sources shall be documented. Compost obtained from all other sources shall comply to the following:*

- a) shall not exceed the maximum levels of arsenic, cadmium, chromium, lead and mercury (mg/kg) and foreign matter outlined for unrestricted use compost (Category A), as specified in the Guidelines for Compost Quality;*
- b) shall meet criteria for acceptable levels (MPN/g total solids) of human pathogens as specified in Guidelines for Compost Quality; and*
- c) shall not cause heavy metal buildup in soil.”*

The compost feedstocks used to create Transform Compost Products’ soil conditioner is a blend of liquid dairy cattle manure, poultry broiler litter, and clean white wood chips. The dairy and poultry manures are sourced from animals that from one farm which are able to roam freely in a barn, and are not kept permanently in the dark, which conforms to the criteria specified in 5.5.1 of CAN/CGSB-32.310 which states:

*“Animal manure produced on the operation shall be used first. When all available manure is used up, organic manure from other sources may be used. If organic manure is not commercially available, non-organic manure is permitted provided that:*

- a) the non-organic source is not a fully caged system in which livestock cannot turn 360°, and*
- b) livestock is not permanently kept in the dark, and*
- c) the source and quantity of manure, type of livestock, and evaluation of the criteria in 5.5.1 a) and 5.5.1 b) shall be recorded.”*

The wood chips used in the process are clean softwood chips sourced from Valley Carriers in Abbotsford. The compost is screened to 3/8” after composting, which allows the wood chips to be recycled back into the composting process.

The levels of trace elements and foreign matter conform to the requirements in the Guidelines for Soil Quality:

Trace Element	CCME	TCP
	Class A	Soil Conditioner <sup>a</sup>
	mg/kg dry weight	
Arsenic	13	1.68
Cadmium	3	BDL
Chromium	210	11.21
Lead	150	4.12
Mercury	0.8	BDL
a - December 1, 2023 analysis - A&L Labs		
BDL - below detection limits		



# Transform Compost Products

*healthy soil, healthy future*

Transform Compost Products's soil conditioner contains no foreign matter or other contaminants. The sharp foreign matter and total foreign matter is below detection limits (attached analysis).

Transform Compost Products' soil conditioner has a fecal coliform content of 53 MPN/g dry solids and no Salmonella (analysis attached), which meets the limits for acceptable levels of human pathogens as specified in the Guidelines for Compost Quality:

*"Organism content shall meet the following: "Fecal coliforms < 1000 most probable number (MPN/g) of total solids calculated on a dry weight basis, and No Salmonella sp. With a detection level <MPN/4g total solids calculated on a dry weight basis"*

Best practices known to eliminate human pathogens during the composting process have been used, including temperatures exceeding 55 C throughout all of the material for a specified time, and by adequately stabilizing the compost (Respiration rate < 4 mg CO<sub>2</sub>-C/g OM/day – CCME Guidelines for Compost Quality)

Prepared by John Paul, PhD PAg

