Society Promoting Environmental Conservation

South Coastal BC Compost Guide

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What is this Compost Guide about?

This publication is an updated version of the 2018 'Composts for Farm Use Survey' SPEC document created with the purpose of pursuing the issues relevant to the evaluation of local composts for farm use. For more more in-depth discussions of the selection and use of composts.

Why are local composts important?

Soils on small farms and gardens in south coastal BC are often in need of supplemental organic matter and nutrients, especially nitrogen. When sourcing agricultural inputs to add organic matter and nutrients to the soil, it is vital to consider the options that are available locally. Using composts derived from local feedstocks (e.g. livestock manures, food wastes and yard trimmings), instead of imported conventional or organic nutrient sources, reduces the environmental impact in the region and can be more economical. This guide was created to help agriculture become more locally nutrient self-sufficient, as there is an overabundance of nutrients in this region, that left unused, can cause environmental problems.

Why should I apply compost to my farm?

There are many benefits!

- Source of nutrients
- Increased nutrient retention
- Increased water retention
- Improves soil structure and aeration
- Increased soil organism abundance and diversity = increased nutrient cycling

Composts and composted manures can be a good source of nutrients (depending on the quality of the compost) and soil organic matter. Composts act as a nutrient reservoir where nutrients are released slowly over a longer period of time (years). Increased organic matter also means more food for soil organisms. It is the soil organisms which are responsible for decomposition and releasing nutrients into plant available forms.

Organic matter in the form of composts increases the water and nutrient holding capacity of soils, which is especially important for sandy soils. A higher nutrient holding capacity is the ability of a soil to "hold" or

bind nutrients to its surfaces. This is important because nutrients are less likely to be lost through processes such as leaching and erosion. The higher water retention means that more available water is stored in the top layers of soils, where crops require moisture, reducing irrigation requirements in the summer.

Fine and medium textured soils (found in the Fraser Delta) are susceptible to compaction (after tillage, rainfall and/or other heavy machinery) which results in ponding of soils and reduced air flow. Adding organic matter helps to improve soil structure, reducing the likelihood of a soil to become compacted. Thus, a good soil structure allows for lots of pore spaces in the soil which allows for root growth and the movement of air and water.

What should I consider before purchasing my compost?

Get to know your soil, crop nutrient requirements and local composts available!

Step 1: Determine the soil texture of your farm soil. This can be done through hand texturing or as part of a lab soil test. Refer to the following video to help you roughly determine your soil texture: https://www.youtube.com/watch?v=Mq4OjwTKXjU.
This is important because sandy soils (coarse textured) will have different organic matter requirements and will require more nutrient inputs (leaching occurs very easily) than clay soils (fine textured).

Step 2: Soil test. Previous management and vegetation on a site can alter soil physical and chemical properties. Doing a soil test before selecting a compost will aid in a creating a better nutrient management plan, that is sufficient for your crops without causing crop or environmental damage. Soil testing with many plots can be financially prohibitive for small-scale farms, especially in mixed vegetable production systems. Therefore, farmers can consider sampling a "benchmark plot" that is representative of the farm soils and management.

Soil tests are important to understand the chemical environment of your soil. This provides information such as the pH of the soil, which may need to be altered if it is too low or high, as the acidity of a soil can change nutrient availability or be at a level intolerable for plants. This also allows information on the current levels of nutrients in the soil, which overtime provide a way to monitor if nutrients are being over or underapplied through organic amendments, saving money for a farmer in the long run. Certain micronutrients such as trace elements can greatly inhibit plant growth if not present in the native soil and so a monitored application may be required. This application can be difficult without a soil test, as these nutrients have a small threshold between limiting plant growth and becoming toxic in very minute changes in concentrations. An example of this is boron, which is often a yield limiting nutrient in sandy soils in Metro Vancouver. Over-application of nutrients can result in environmental problems, especially to our water quality and will be discussed in another section.

Soil tests will become more important as *The Agricultural Waste Control Regulation* is now being changed to the *Code of Practice for Agricultural Environmental Management* and will have stricter regulations on application of nitrogen and phosphorus.

Step 3: Consider crop nutrient requirements. Certain crops are heavier nutrient feeders and require more nitrogen than others. The IPNI calculator (https://www.ipni.net/app/calculator/home) is a tool that allows you to know how much nitrogen is removed for specific crops over the growing season based on a desired output. However, keep in mind that different varieties of the same crop will vary in their nutrient requirements.

Step 4: Once soil texture, current soil nutrient status, and crop nutrient requirements are understood, a suitable compost can be selected. Table 1, which shows the compost nutrient analysis, will help you decide what kind of compost you need. Table 2, listing the price, delivery and location of the compost company will help address other needs and constraints to purchasing.

How do composts differ?

Not all composts are created equal. Feedstock mixture, processing and storage practices determine the compost characteristics and possible contaminants.

The feedstock used in municipal organic waste facilities mainly consist of residential food waste and yard trimmings. As a result, there is a higher risk of contamination of visible and non-visible traces of heavy metals, plastic and glass. However, composting facilities must adhere to the Organic Matter Recycling Regulations (OMRR), which sets thresholds of levels of contaminants allowed prior to land applications. Compost companies can go beyond these requirements and choose to become OMRI (Organic Materials Review Institute) certified, meaning the level of contaminants is low enough to be suitable for organic production systems. Composted livestock manures are typically a mix of feces, urine along with some kind of bedding (sawdust, straw, sand). These composts run the risk of fecal contamination if high temperatures (>55 C) in composting are not sustained long enough to kill bacteria. Additionally, they may contain weed seeds that could not be killed if processing is not hot enough.

The process and infrastructure of a composting facility influences compost characteristics and quality. Managing the appropriate mixes of feedstocks, moisture, temperature, oxygen and coverage of the composting material is vital to reduce nutrient losses, smell, and the stability of the compost. Composting management practices thus play a key role in determining the quality of compost. The scope of this document was not sufficient to assess compost facility management, hence our reliance on compost analysis data for indicators of compost quality. We also recommend talking to other farmers about their experience with a certain compost company for quality control.

How do I ensure I am applying a good quality compost?

By evaluating quality indicators including compost stability, maturity, contaminants and nutrient content.

Compost stability and maturity

Compost stability is a measurement of the level of biological activity. A compost is unstable when the level of biological activity is high, meaning the feedstock material has not been fully decomposed and microorganisms are highly active. This is reflected in a high compost pile temperature. If an unstable compost is applied to the soil, it can potentially burn the plants as a result of the high temperature or partial

decomposition products such as ammonia. Unstable composts can still be applied, but they should be incorporated into your soil before planting or not applied to closely to seedlings. Alternatively, if your compost arrives hot, you could store the compost on site for another few weeks until the temperature is reduced.

Compost maturity refers to the neutralization of potentially harmful compounds for plants which can be created during the composting process. If an immature compost is applied, it can harm plants by limiting seed germination and root growth or even by killing sensitive plants. Like an unstable compost, it can be applied if it is early enough in the spring season or stored for a period of time on the facility. An immature compost often has a strong odour.

You can contact your compost supplier for further information about the maturity and stability of the compost. Currently, most companies have not provided these tests, however we encourage inquiring for them, so they are utilized in the future, as this is important for your farm. The newest method for testing is known as the solvita test kit which measures these parameters for compost quality. These kits are quite expensive for a single farmer, who would likely require it once a year, but would be a valuable investment for compost companies to prove the quality of their compost. If you're not sure about the maturity and stability of your compost, it is always a good idea to store it on-farm for some time to allow it to cure. Refer to the Code of Practice for Agricultural Environmental Management, for regulations around storage of compost on farms. Another option for determining stability and maturity is to apply compost in a small area and see if a seedling is damaged.

Contaminants

There are certain contaminants that are visible (i.e. plastics, broken glass, sharp metal objects and noxious weed seeds) or not visible (i.e. heavy metals, pesticides, herbicides, pathogens). Most composts available in south coastal BC have undergone thermophilic (high temperature) decomposition, which reduces the risk of pathogen and weed seed survival in the end product. This assumes that the composter thoroughly mixes the pile and that all areas reach temperatures of 55˚C or more for a sufficient period. However, there are certain sites and conditions where these contaminants may be an issue.

Pesticides and herbicides typically degrade in the environment and only become an issue when they are a resistant chemical. The presence of pesticides and herbicides in local yard trimmings composts tends to be infrequent due to the low use of persistent chemicals for landscape management in Metro Vancouver. However, if a compost is purchased from a conventional farm, there are certain persistent pesticides and herbicides that can be harmful such as clopyralid, aminopyralid, picloram and chlorpyrifos. Therefore, we recommend inquiring with the farm supplying the compost if these chemicals have been applied.

Noxious and invasive weeds can also be problematic in facilities where the compost has been stored for a long period of time (wind-blown seeds) or where landscape waste is dumped in contact with finished compost. If sand is mixed into the compost, this may introduce weed seeds and other contaminants. Similar to testing the stability and maturity of the compost, when there is worry about weeds, a separate pot

treatment is recommended. This would consist of applying compost in a pot with soil, watering it, and seeing if weeds sprout over a period of time.

Salinity (seen as high Electrical Conductivity in Table 1), another non-visible factor, can be harmful to plants, but is a common characteristic of nutrient rich composts and not of concern if application rates are appropriate, and if seedlings are not exposed to fresh applications.

In British Columbia, the Organic Matter and Recycling Regulation (OMRR) regulates composting processes and compost products. OMRR is used to determine if a compost is stable, mature and pathogen-free as well as if it contains acceptable quantities of trace elements and foreign materials (plastics, glass, metals). OMRR classifies compost as class A and B depending on process and quality criteria. One of the main differences is the acceptable levels of contaminants (shown in the table below). They also identify certain allowable contaminant levels for agriculture as highlighted below. Based on this information, class A compost falls within the allowable amounts for agricultural use. We encourage you to question compost companies for this information as the values will vary by batch.

Substance	Class A compost (µg/g)	Class B compost (µg/g)	Agricultural Land Use (µg/g)
Arsenic	13	75	N/A
Cadmium	3	20	N/A
Chromium	100	1060	N/A
Cobalt	34	150	40
Copper	400	2200	N/A
Lead	150	500	N/A
Mercury	2	15	N/A
Molybdenum	5	20	5
Nickel	62	180	150
Selenium	2	14	2
Zinc	500	1850	N/A

Nutrient analysis of composts

Table 1 at the end of this document shows the nutrient analysis of different local composts. It is very important to consider that nutrients in composts are relatively more stable and are released relatively slower than manure and incorporated cover crops (green manure). Please keep in mind that the values shown in Table 1 fluctuate from batch to batch and should only be used as a reference. For more information about interpreting the nutrient analysis of composts, please check out the Glossary section.

When should I apply my compost?

Depends on nitrogen mineralization (i.e. the conversion of nitrogen to plant available forms through the activity of soil organisms), but usually in the spring when the soil temperature is warm enough to stimulate microbial activity.

Since coastal BC experiences heavy rainfall during the fall/winter months, plant available nitrogen would substantially decrease by the time spring arrives. Therefore, compost application in the spring time is important and fall and winter applications are not recommended.

The timing of compost application is very dependent on crop requirements for nitrogen and nitrogen release rates. Carbon to nitrogen ratios less than 20 are sufficient to ensure nitrogen mineralization and release but have the potential of burning new seedlings if compost is unstable/immature. Therefore, composts with a C/N ratio below 20 should be applied and incorporated into the soil a few weeks before planting begins to allow it to stabilize. With slow-release organic sources, time should be allowed for plant available nitrogen release to take place prior to its large nutrient demand period during its growth phase.

Under the new Code of Practice for Agricultural Environmental Management it is not permitted to apply nutrient sources (which includes any materials produced in accordance with OMRR) to land in a high-precipitation area (characterized by an average precipitation of 600mm or more between October 1 and April 30) between November 1 and February 1 of the next year and/or during strong, divergent windy conditions.

How much compost should I apply?

The BC government has created a nutrient management calculator that can help determine how much compost, manure etc. to apply to your farm based on the compost analysis, soil test and other inputs such as cover crops. of that amendment. It requires location, how many fields and optional soil test inputs that will let you know if you are supplying sufficient amounts. However, if you have not done a soil test, these results will only be useful for nitrogen applications. Please refer to the link below for more information:

https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/soil-nutrients/nutrient-management/nutrient-management-calculator

Please keep in mind that these are relatively rudimentary suggestions as they do not include important values such as the C:N values which determine mineralization or immobilization of nitrogen. A more advanced technique is utilizing the Oregon State University extension calculator which can be found here: https://extension.oregonstate.edu/organic-fertilizer-cover-crop-calculators

Below are a number of calculation conversions to determine how much compost to purchase based on the farm area and the desired amount on the soil:

___ m^2 x __ cm of compost x 0.01= ___m^3 of compost x 1.3 = __yd^3 of compost

__ft_2 x __ inches of compost x 0.0031= ___yd^3 of compost

___ m^2 x __ inches of compost x 0.034= ___yd^3 of compost

__ acre x _ inches of compost x 135.04= __ yd^3 of compost

__ hectare x __ inches of compost x 340 = __ yd^3 of compost

Another option to consider is the Environmental Farm Plan. Part of their services includes complimentary nutrient management plans. Refer to the following link for more information: http://ardcorp.ca/programs/environmental-farm-plan/

What are the consequences of mismanaging compost applications and how do I avoid doing so?

Overapplication and improper timing of nitrogen and phosphorus can result in water pollution and poor water quality.

Often, farmers overapply composts to ensure that crop demands for nitrogen are met. This is evident in the concerningly high rates of nitrates in the Fraser Valley's groundwater. Because plant available forms of nitrogen (nitrates and ammonium) are water soluble, they can potentially leach down into ground water systems and contaminate them. Another issue with nitrogen overapplication is that it can favour nitrogen loving weeds which can worsen weed control and stimulate competition with crops.

Accordingly, if compost is the only nutrient source relied on and applied based on the crops' N needs, farmers might end up adding excessive amounts of other nutrients, especially P and K to the soil. There has been heavy P accumulation in the soils of many farms in BC, especially when farmers use manure or manure-based composts. This is due to the N/P ratios in applications. More nitrogen is required by plants compared to phosphorus and yet the manures contain high amounts of phosphorus, so when applying to meet nitrogen demands, phosphorus overapplication occurs. This is becoming a major problem in British Columbia as much of this overapplied phosphorus ends up in our waterways and causes eutrophication (algal growths). These algae growths use up the oxygen in the water, killing other organisms (such as salmon) and can block waterways.

Since compost should be applied in late spring or early summer, mineralization is likely to continue to release plant available nitrogen and phosphorus even after the crop has matured and is no longer requiring more nutrients. Since mineralization rates are hard to predict and control, it is recommended that after harvesting your crop, cover crops are planted as soon as possible in order to absorb the excess plant available nitrogen being released. The following season, these cover crops can be turned in and incorporated into the soil, recycling and conserving last year's nutrients.

Another nutrient management strategy would be to add nitrogen with minimum phosphorus levels to the soil. This can be done by incorporating legumes as an extra N source into the system, either as cover crops or cash crops. Additionally, planning crop rotations on your farm that rotate between heavy nitrogen feeders (i.e. brassicas), to lower nitrogen feeders (i.e root crops or legumes) on different years. Lastly, if N

demands are still not being met, additional N sources, such as blood meal, fishmeal, feather meal that can contain up to 10 times more N than composts can be combined with compost application. However, the costs/kg of N for these products can be prohibitive.

Availability and costs

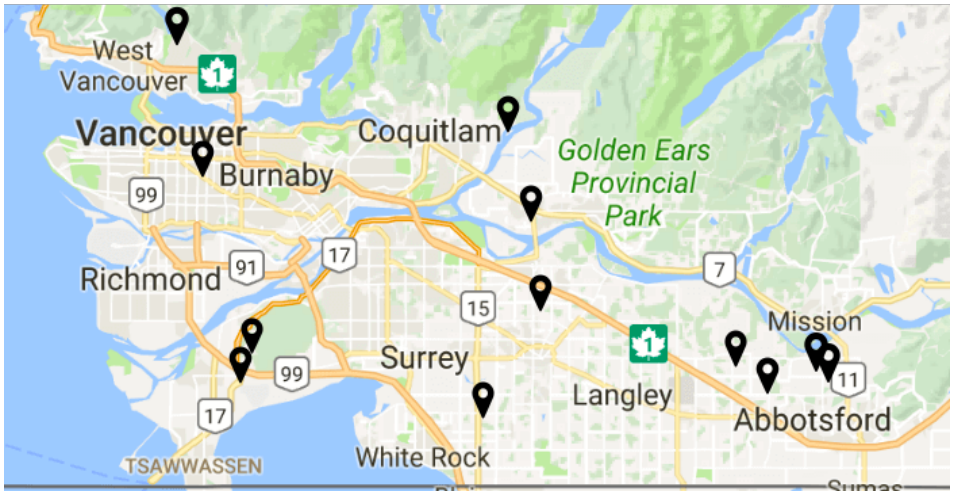
Composts are bulky materials and much of the cost to the end user is related to the expenses of materials handling and transportation, and not to the effectiveness of the compost as a fertilizer or soil builder. Costs increase with distance from the composting facility and the participation of haulers and retailers. Finally, the cost of bagged materials will almost always be significantly greater than bulk deliveries, and the added cost is difficult to justify for farm use.

Composts for Farm Use in the Lower Mainland

Over the course of early 2019, we contacted the same companies in the Lower Mainland that were contacted the previous year with the addition of several additional composting facilities. Information on the nutritional content of the various composts (Table 1), and purchase and delivery details (Table 2) is presented in the tables below. Please refer to the glossary below for a brief explanation of any unfamiliar terms.

The information below is current as of March 2019 but is subject to change over time. Companies that did not provide a nutritional analysis have been omitted from Table 1. Note that we were unable to get comprehensive information on compost contaminants. We would appreciate farmer observations as to the presence of visible contaminants, such as plastics, glass, and metal objects. Also, any suggestions for improving this survey would be greatly appreciated and can be sent to olga.c.lansdorp@gmail.com.

Map of Compost Suppliers



Additional Information

Guidelines for Compost Quality:
http://www.ccme.ca/files/Resources/waste/compost_quality/compostgdlns_1340_e.pdf

Soil Fertility in Organic Systems: A Guide for Gardeners and Small Acreage Farmers:
http://cru.cahe.wsu.edu/CEPublications/PNW646/PNW646.pdf

Compost Use and Soil Fertility:
https://ag.umass.edu/vegetable/fact-sheets/compost-use-soil-fertility

Glossary

Table 1 – Nutritional Analysis (in alphabetical order)

C:N: is a good indicator for estimating N release. A rule of thumb is that a compost should have a C:N ratio of less than 20:1 for N to be available to plants. The higher the ratio, the less available nitrogen. Composts with C:N ratio higher than 30:1 can reduce plant available N after their application; which is not beneficial if short-term N release is required for your crops. Composts that release nutrients slowly can be beneficial for increasing soil organic matter and improving the long-term sustainability of farm's nutrient and water management practices.

P_2O_5: The compost P% values have been converted to the oxide form, P2O5, in order to facilitate comparisons between composts and commercial fertilizers, which express their P content in the oxide form (compound containing oxygen). About 50% of this phosphorus in composts will become plant available in the first year. Although P can be a useful fertilizer constituent of composts, many soils in south coastal BC already have high to excessive available P levels. Adding more P risks environmental pollution and imbalances with other nutrients.

N:P_2O_5: One should consider soil levels of available P and the N: P_2O_5 ratio when comparing composts. When composts are applied to meet nitrogen demands of crops; the N to P ratio (N:P) in these composts is typically lower than the crop N:P ratio needs, as crops require more nitrogen than phosphorus, resulting in an over-fertilization. This means that if composts are applied to meet nitrogen demands, phosphorus is overapplied. A higher the ratio of N:P in the compost will result in a more balanced phosphorus application rate. This should be considered when comparing previous farm soil tests as phosphorus levels are often quite high already, in which case, it is suggested to select a higher N:P ratio compost. Additionally, supplementing compost with pure nitrogen fertilization or using cover crops or crop rotations with inoculated legume species to boost nitrogen in the soil so less of the compost needs to be applied, as nitrogen is needed in the largest quantity of the nutrients.

Ca%: Calcium (Ca) is important for cell nutrition, stress response, and nutrient uptake, but is usually supplied during the process of liming to reduce soil acidity.

Est E.C.: Estimated Electrical Conductivity (EC) is a measure of the total salt content of the compost. If too low, it means that the compost may be lacking in nutrients, and if too high (>3 to 4 mS/cm), the compost may be harmful if in direct contact with seeds and seedlings.

K_2O: Potassium oxide, the oxide form of potassium (K). We've converted K to K_2O to match the way this nutrient is reported in commercial fertilizers. Potassium is important for photosynthesis, lodging and disease resistance, and the transportation of water and nutrients, among other things. Compost K is highly available and nearly equivalent to mineral K fertilizers.

MgO%: Magnesium oxide (MgO) is important for plant photosynthesis and helps legumes to fix nitrogen. Many south coastal BC soils are low in Mg and compost Mg additions are often useful.

Na%: Sodium (Na) is not an essential plant nutrient but can be toxic if present in high quantities. It does not appear to be a problem with local composts.

pH: Is a measure of acidity or alkalinity of the compost, using a scale from 0 to 14. A pH of 7 means the compost is neutral, with numbers below that indicating acidity, and numbers above it indicating alkalinity. Because different plant species thrive at different pH ranges, it is important to be aware that your compost can affect the pH of your soil, depending on the quantity added. Almost all composts are alkaline, in some cases caused by Ca or Mg constituents and, in others, a temporary effect of high levels of ammonium N.

Total N%: Nitrogen (N) is vital for plant cell growth and function, because it is a crucial component of proteins, enzymes, and nucleic acids. Ideal range: 2% or higher. However given the wide range of OM%, the best indicator of short-term N fertilizer values of compost may be the C:N ratio, which should be < 20 for a N response in the year of application.

Generally speaking, nitrogen release from composts is complicated as it is dependent on a number of factors: C/N ratio, mineralization rates based on materials and % N in the compost (need >2% for mineralization). Its availability will be discussed in the nitrogen calculation section on how much to apply. It is further complicated by the fact that N is released in the first year of application, and during the subsequent years N release continues at lower levels. The release of P is about 50% and K 90% in the first year. Accordingly, composts applied for meeting N needs are generally adding excessive amount of P to the soil.

Total OM%: Total Organic Matter (OM) content. Refer to Organic Matter under Soil Requirement. Total OM contents in surveyed composts ranged from approximately 30 to 84%, indicating that the remainder is not organic material. This is not necessarily a problem, but indicates that the compost payload of OM and N may be diminished in composts with low OM%, as compared to composts with high OM%.

Although minimum levels of soil organic matter for successful crop production can vary, it can be generalized that coarse (sandy) textured soils, such as at the UBC Farm, should have 10% or greater organic matter for sustained production. Medium to fine textured soils (clays, silts, loams), such as on the Fraser Delta, become susceptible to poor aeration and ponding when soil organic matter levels drop to 2-3%.

Table 2 – Purchase and Delivery Details (in order of appearance)

Feedstock: the main ingredients of the compost recipe.

OMRI listed: a product is included in the Organic Materials Review Institute (OMRI) list once it has passed an OMRI expert review and has been approved for use as an input in organic production. Local composts do not have to be OMRI approved to be acceptable inputs for organic farms.

Price: the pick-up price of the product, whether bulked or bagged.

Delivery Price: the cost to get your compost delivered.

Minimum purchase: the minimum volume of compost that the company delivers.

Split drops: whether or not the company will split the purchased volume, delivering part of the compost to one place, and part of it to another.

Type of truck: the type of truck used to make deliveries.

Delivery radius: where/how far companies deliver compost.

Table 1: Nutritional Analysis. Summary of the nutritional content of the compost products surveyed. Companies that did not provide a nutritional analysis were not included in the table. Refer to the Glossary below for a brief description of terms.

Company	Product	pH	Est. E.C. (mS/cm)	Total OM%	C:N	N:P_2O_5	Total N%	P_2O_5%	K_2O%	Ca%	MgO%	Na%	Maturity Index
City of Vancouver	Compost soil	7.7	2.0	38.8	20.7	18.4	1	0.05	0.36	1	0.18	0.03	N/A
EnviroSmart Organics	Plant Mix: Sand and Municipal Compost	6.7	1.4	13.2	12	23	0.64	0.03	0.05	0.29	0.05	0.01	N/A
Go Green Compost	Go Green Compost	7	4.1	50.6	>30	0.6	0.88	1.39	1.67	0.03	0.50	0.28	N/A
Hop Compost	Hop Organic Compost	7.2-8.5	5.0	81.4	11	1.68	3.87	2.30	0.80	0.60	0.07	0.39	N/A
Hopcott Farms	Composted Steer Manure	N/A	N/A	N/A	N/A	1.2	0.59	0.48	0.61	N/A	N/A	N/A	N/A
Net Zero Waste	Boost – Coarse Screened (5/8”)	8.8	5.0	49.1	13	2.3	2.20	0.96	0.90	2.90	0.53	0.33	N/A
	Boost – Fine Screened (1/4”)	6.9	6.9	56.9	12	2.7	2.50	0.94	1.20	2.40	0.40	0.21	N/A
Premium Soils	Compost Mix (with sand)	7.8	1.9	22.7	28	15.4	0.47	0.03	0.12	0.29	0.04	0.02	N/A
Renewii (Orgaworld)	Class A Compost	7.5	1.7	39.4	12.5	N/A	2.04	0.09*	0.75*	2.30	0.40	0.28	N/A
Transform Compost Products	Worm Casting	6.9	4.5	29.0	11	14.4	1.58	0.26	0.41	0.47	0.18	0.06	8**

* P and K levels for Renewii (Orgaworld) are values for ‘Available Phosphate-P’ and ‘Available Potassium-K’. These values do not reperesent total P and K and are not comparable to other composts’ values in this table.

** Maturity Index: 8 means “inactive, highly matured compost, very well aged, possibly over-aged like soil; no limitations for usage”

Table 2: Purchase and Delivery Details. Summary of important information regarding the purchase and delivery of compost for all the companies surveyed. Refer to the glossary on page 9 for a description of any unfamiliar terms.

Company	Contact Information/Address	Product(s) & Feedstock	OMRI Listed	Price	Delivery
Net Zero Waste	Phone: 604-557-7065 Website: www.netzerowasteabbotsford.com Address: 5050 Gladwin Road, Abbotsford, BC V4X 1X8	BOOST Compost Fine Screened BOOST Compost Course Screened Feedstock: food waste, green waste, grass clippings, agricultural and fishing waste	Yes	Bulk Fine screened: $40/yd^3 Course-screened: $30/yd^3 (discounted to $20/yd^3 from October to March) Discounts available for orders over 5yd^3 Bag 4L bags: $4/bag or $10/3 bags 32L bags: $8/bag or $30/4 bags Fill your own 32L bag/bucket for $5	Does not deliver directly but can provide with truck delivery information. Delivery price based on distance from facility (no minimum purchase).
Hop Compost	Phone: 604-327- 0137 Website: www.hopcompost.com Address: 1328 SE Marine Drive, Vancouver, BC V5X 4K4	Hop organic craft compost Feedstock: feedstock of food waste from select local restaurants, cafes and grocers, and no feedstock is accepted from third-party. Food waste blended with deciduous wood waste from select local arborists	Yes	Bulk $159.35/yd3 Bag $10.35/ 7.3 kg bag	Price: Quoted by location and volume Minimum Purchase: 1 yard or 1 bag Split drops: Yes Type of truck: 17 ft straight box Delivery radius: Metro Vancouver

Renewi Canada Ltd. (OrgaWorld)	Phone: 778-806-1206 Website: www.surreybiofuel.ca Address: 9752 192 Street, Surrey, BC, V6N 4C7	Class A compost as per OMRR Feedstock: food waste, green waste, grass clippings	No	Bulk N/A Bag N/A	Not currently selling directly. Please contact them for more information.
Hopcott Farms	Phone Bob Hopcott: 604-816-5643 Brad Hopcott: 604-341-6420 Address: 182111 Old Dewdney Trunk Rd, Pitt Meadows, BC V3Y 2R9	Composted steer manure Feedstock*:* Cattle manure and sawdust used for bedding	No	Bulk $20/yd^3 with a minimum $40 purchase Bag $2/30lb bag Buy 10 get 1 free	Price: Quoted by location and volume Minimum Purchase: 2yd^3 Type of Truck: Single Axle dump truck Delivery Radius: All of Fraser Valley to West Vancouver.
J. Baird Cattle Co	Phone: 604- 868-3372 Address: 17256 8th Ave Surrey, BC, V3Z 9R5	Steer Manure Feedstock*:* Aged screened steer manure	No	Bulk $20/yd^3 Bag $5/40kg bag or 5 bags for $20	Price: $85/hour Minimum Purchase: N/A Split drops: no Type of Truck: Holds up to 10 yards (push out box) Delivery Radius: Langley, Surrey, Delta, Richmond
Premium Soils	Phone: 604-541-7645 E-mail: info@premiumsoils.ca Website: www.premiumsoils.ca Addresses: Burnco Landscape Supplies: 19779 56 Ave, Langley BC Pacific West Landscape Supplies 1990 1st Street W, North Van	Feedstock*:* Proprietary blend of composted manure and sand mix	No	Bulk $25/yd^3	Price: Quoted upon request. Delivery of yard bags costs around $55 Minimum Purchase: 4yd^3 Split drops: Likely with additional charge Type of Truck: Up to 17 yd^3 (dump truck) Truck and transfer: up to 40 yards Delivery Radius: Throughout the Fraser Valley and lower mainland

Go Green Compost (Gelderman Farms)	Phone: 604-864-9096 (Jerry or Audrey) E-mail: sales@geldermanfarms.com Website: www.geldermanfarms.ca Address: 35805 Vye Road, Abbotsford, BC V3G 1Z5 Compost can also be purchased at: Sunrise Garden Centre 28563 Fraser Hwy, Abbotsford, BC V4X1L1 Valley Pulp and Sawdust 4491 Gladwin Rd, Abbotsford, BC V4X 1W6	Feedstock: hog manure with sawdust bedding.	No	Bulk $30/yd^3 (with discount on larger and repetitive orders) Bag $6/30L bag. Price changes to $5/30L bag if you order over 10 bags.	Price: Based on location and distance. Minimum purchase: 6 cubic yards. Split drops: With additional charge. Type of truck: Trailer (6-8 yards), gravel truck (8-25 yards) and semi-truck and trailer (25-40 yards). Delivery radius: does not have one.
Envirosmart Organics	Phone: 604 946-0201 (Rochelle) Address: 4295 72nd Street, Delta, BC, V4K 3N2 Website: http://gflenv.com/gfl-locations/enviro-smart-organics-west-coast-instant-farms/	Planting Mix Feedstock: 50/50 Sand and municipal waste collections compost	No	Bulk $28.00/yd^3 with the purchase of 1-3 yd^3 $25.00/yd^3 with the purchase of 4-8 yd^3 $18.00/yd^3 with the purchase of more than 8 yd^3	Price: Vancouver/Burnaby/Langley/, New Westminster: $165 + $18/yd^3 Richmond/Delta/Surrey: $148.50 + 18/yd^3 Ladner/Tsawwassen: $126.50 + $18/yd^3 North Vancouver/Coquitlam: $253.00 + $18/yd^3 West Vancouver/ Port Moody/ Maple Ride/Abbotsford: $286.00 + $18/yd^3 Minimum Purchase: 10 yards for delivery Split drops: Yes

Transform Compost Products	Phone: 604-856-2722 John Paul (owner): 604-302-4367 E-mail: info@transformcompost.com Website: www.transformcompost.com Address: 3911 Mt. Lehman Road, Abbotsford, BC V4X 2N1	Transform Worm Castings Feedstock: blend of 50% OMRI approved food and yard waste compost from the District of Mission, and 50% rotted separated dairy cattle solids.	No. But he sells to organic growers and provides all the information needed. Meets the CCME class A compost standards.	Bag $10/20L bag (12 kg)	Does not deliver.
City of Vancouver	Phone (landfill): 604-606-2700 Website: https://vancouver.ca/home-property-development/compost-soil.aspx Address: 5400 72nd St, Delta, BC V4K 3N3	Feedstock: yard trimming consisting of grass clippings, leaves, and woody pruning, Plus incorporated soil.	No	Bulk $8/$m^3$	Delivery service is not available. Minimum Purchase: 6m^3