

TO: Regional District of Nanaimo
Committee of the Whole

MEETING: October 10, 2017

FROM: Jamai Schile
Senior Planner

FILE: 0360 20 AAC

SUBJECT: AAP Implementation – Composting Facility Project

RECOMMENDATIONS

1. That the Board receive this report and the results of the composting needs questionnaire.
2. That the Board direct staff to update the “Growing Our Future” website with details of the existing commercial compost facilities in the region.
3. That the Board deem the Composting Facility Project complete.

SUMMARY

The Agricultural Area Plan Implementation Action Plan identifies Project No. 6 - the Composting Facility as a high priority to be addressed in the short-term. In response, the Composting Facility project was launched in July 2016 for the purpose of determining the need for an agricultural compost facility in the region. To date, a targeted questionnaire and a tour of commercial composting facilities in the region has been completed. The questionnaire results show that producers currently have adequate access to compost and do not produce more compostable material than what they can manage on-site. In addition, the questionnaire reveals a general lack of interest for an agricultural compost facility combined with concerns regarding funding and uncertainty about product quality. Based on these findings, staff recommend that the RDN “Growing Our Future” website be updated to include information about existing commercial composting facilities in the region, the project be deemed complete and no further works be undertaken.

BACKGROUND

The Agricultural Area Plan (AAP) Implementation Action Plan for the period 2014 to 2016 identifies six projects, one of which is the Composting Facility project.

At the April 22, 2016, the Agriculture Advisory Committee (AAC) passed a motion recommending that the Board re-prioritize the Composting Facility project from low priority to high priority and from a medium timeframe to a short timeframe. In response, Regional District of Nanaimo (RDN) staff prepared a three-part approach to address the project’s objectives, which was supported by the AAC at its June 24, 2016 meeting.

In July 2016, staff initiated the Composting Facility project. However, since the AAC does not meet regularly, the minutes of the June 24, 2016 AAC meetings were considered by the Committee of the Whole (COW) at its September 13, 2016 meeting. At this meeting, the COW deferred the staff report relating to receiving the composting project update even though the project was near to completion.

MOVED Director Houle, SECONDED Director Lefebvre, that the minutes of the Agricultural Advisory Committee meeting held Friday, June 24, 2016 be received for information.

*AAP Implementation – Project 6: Exploration of Composting, Project Discussion.
This item was deferred*

Minutes of the Agricultural Advisory Committee meeting held Friday, August 26, 2016.

MOVED Director Houle, SECONDED Director Lefebvre, that the minutes of the Agricultural Advisory Committee meeting held Friday, August 26, 2016 be received for information.

The focus of this report is in response to the deferral, to present the results of the questionnaire and to conclude the AAP Implementation Action Plan item – the Composting Facility project.

DISCUSSION

The Composting facility project consists of three elements, including: a targeted questionnaire to obtain input from farmers, a tour for AAC members of existing composting facilities in the RDN, and an update to the “Growing Our Future” website to provide details of existing composting facilities. Of these elements, all have been completed except for the website update.

The questionnaire received a total of 28 responses from farmers representing a wide range of crops and agricultural practices. The questionnaire revealed that most respondents (74%) use compost that originates from their farm as part of their farm operation. Most respondents (71%) indicated that they do not produce more compostable materials than they need on their own farm. Though there was some interest in having access to a facility where farmers can take large quantities of compostable materials, more than half (55%) of respondents indicated that there is no need for such a facility. Additionally, the respondent’s comments show a lack of interest, concern about costs/lack of funding, considered more suitable venture for the private sector, and questioned whether the quality of the product would be suitable for organic farming. (See Attachment 1 Questionnaire Results).

Based on these findings, it is concluded that the majority of respondents have access to an adequate supply of compost material to meet their on-farm needs and do not produce more compostable material than what they can manage on-site. This combined with the general lack of support indicates that further consideration for a regional agricultural composting facility is not warranted.

While staff are not recommending proceeding further with this project, staff do recommend providing information regarding farm waste composting and the availability of local compost to farms on the RDN website “Growing Our Future”. The website would include the name and contact information for the two existing compost operators and applicable services offered. Such an update to the existing, publicly accessible website is not considered time or resource intensive.

The RDN is currently renewing the contract for food waste and yard waste processing with Nanaimo

Organic Waste (NOW). The NOW facility does provide an option for farmers with excess organic materials as NOW is able to accept vegetation and manure waste for processing. This information will also be added to the Growing Our Future web site.

ALTERNATIVES

1. That the Board receive this report and the results of the composting needs questionnaire and direct staff to update the “Growing Our Future” website with details of the existing commercial compost facilities in the region.
2. That the Board receives this report and the results of the composting needs questionnaire and direct staff to take no further action.
3. To provide staff with alternative direction.

FINANCIAL IMPLICATIONS

Staff have reviewed the results of this report and note that the findings have no implications related to the Board 2016 – 2020 Financial Plan.

STRATEGIC PLAN IMPLICATIONS

Staff have reviewed the proposed recommendations and note that they are consistent with the Board’s stated priority of recognizing the importance of agriculture and aquaculture in the region.



Jamai Schile
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September 13, 2017

Reviewed by:

- P. Thompson, Manager, Long Range Planning
- L. Gardner, Manager, Solid Waste Services
- G. Garbutt, General Manager, Strategic and Community Development
- P. Carlyle, Chief Administrative Officer

Attachments

1. Composting Needs Questionnaire Results

Attachment 1

Composting Needs Questionnaire Results

[question1] Are you currently farming or have you previously farmed in the RDN?

Response	Count
Yes	28 100.0%
<i>Total: 28</i>	

[question2] What do you farm?

Response	Count
	24 responses

goats

Purebred registered sheep.

certified organic vegetables

Beef, Pork, Chicken, Eggs

Beef cattle

Beef & Hay

Hay, vegetables, eggs

I've farmed beef cattle, chickens, turkeys and hay. Presently farming hay and horse boarding.

vegetables, some livestock

Hay and horses

Beef cows, Raspberries

herbs, small stock animals, food crops for family and market

We were dairy for 35 years and now the next generation is running beef cattle. I am retired .

previously mixed farm on this land in past decades

sheep and other meat - pigs, cattle, turkeys

chickens

potatoes

corn

now just keep horses and
sell berry jams

mixed- fruit,beef, chickens, veg., forage

hay, grain, pigs

Dairy and Poultry

Berries/vegetables

Berries

Cattle, Hay production

We raise beef & chicken both in Egg production (5000) & meat birds as well as vegetable & sweet corn production

Certified organic vegetables and fruits

Dairy

Cattle

Do you own farmland or lease farmland?

Response

Count

Own

20 80.0%



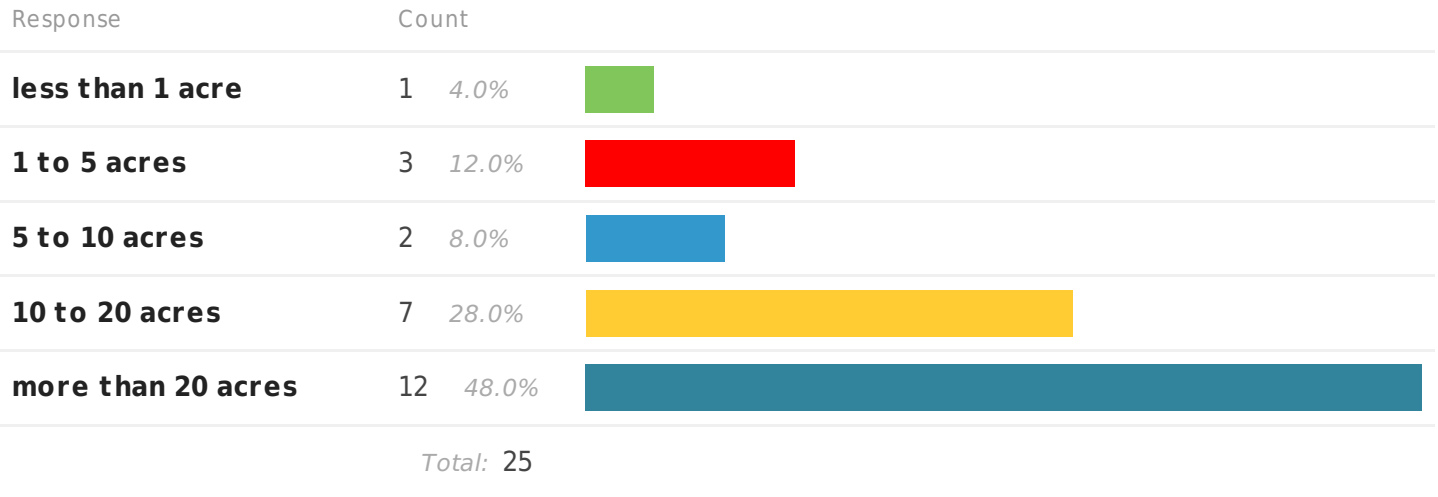
Own and Lease

5 20.0%

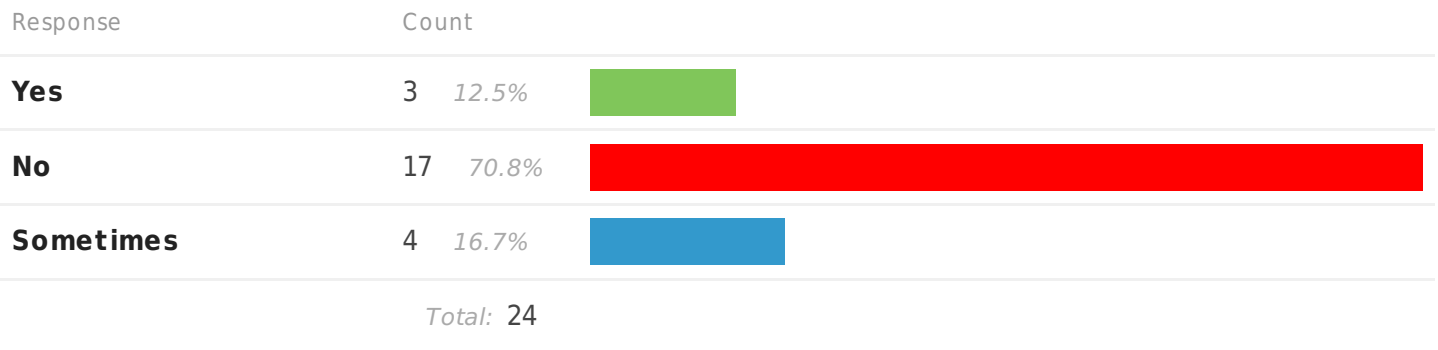


Total: 25

How many acres do you have in production?



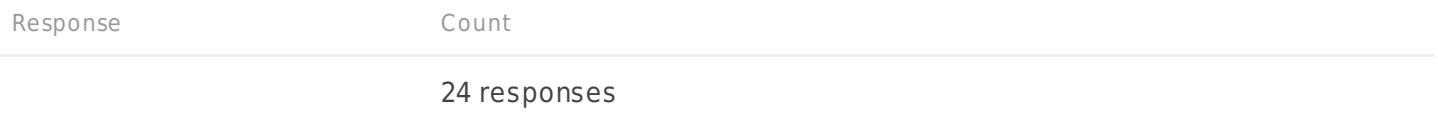
[question4] Does your farm produce more compostable materials (manure, green waste, land clearing debris, animal carcasses, agricultural byproduct, etc.) than you need for your own farm?



[question11] Is there a need to have access to a facility where farmers can take large quantities of compostable materials?



[question3] How do you currently manage on-farm compostable materials (manure, green waste, land clearing debris, animal carcasses, agricultural byproducts, etc.) ?



burn when allowed, give away manure, stockpile

Compost vegetable matter and by-products. Animal carcasses are disposed of off-site.

no manure,
green waste is composted in a heap or in a worm bin, land clearing debris was burned when we developed property.

Compost it

Spread manure

Bury occasional carcass on site

Normally I compost manure myself & put it on my fields. I
always have issues what to do with animal carcasses, bury them or where to compost them.

Land clearing > burn manure/bedding/litter > compost piles
carcasses > bury

I spread my compostable wastes on the hay fields.

tilled into existing fields

Use on fields and gardens.

Work it into the soil

compost, compost, compost with minimal burning or burial of clearing debris and burial of animal carcasses

How many pages would you like me to write about since most of your questions can not be answered with one sentence, because they are either not legal, are against some regulation or wish list of some agency including the RDN. There is no such thing as Green waste. Land Clearing debris is subject to so many regulations that we gave up clearing additional land years ago.

use our manure on our property for soil enhancement for pasture and around fruit trees and garden crops

compost, or burn

on farm composting, spreading compost and/or manure on fields

we have 3 large concrete manure pits

compost box

Land clearing debris - burning

Agricultural by products - Compost

Burn land clearing debris it is not feasible in a farm environment to haul or grind, manure we use as fertilizer

for hay crops

we compost on farm

we do our own composting. We have a chipper to chip winter fallen branches and turn them into chips. we have no animals.

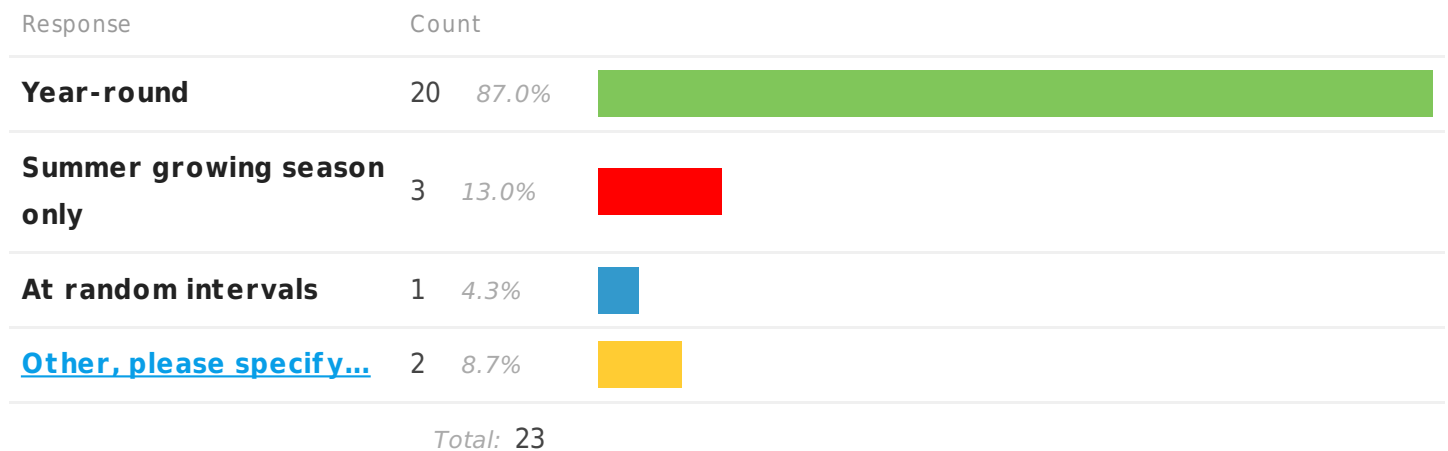
use most of it for gardens and sell what i do not use.

land clearing stuff take to private chipper

animal carcasses to the regional landfill

Bury carcasses, compost dry manure, spread liquid manure and whey on fields.

[question5] When are the majority of compostable materials produced on your farm?



bigger pile up in the fall after major harvests

We bring in organic matter as soil conditioner

Does your farm require off-site soil conditioners or fertilizers?



[question7] In general terms what soil conditioners or fertilizers do you use and how much?

Response	Count
	21 responses
n/a	
Could use more compost. Currently use general purpose 6-8-6 fertiliser for pasture and hay.	
first we cover crop as much as possible, then use non gmo alfalfa, soft rock phosphate, ag lime kelp meal, and from time to time gypsum and boron, as well as fish fertilizer as a hydrolysate and compost made from lumber waste and fish emulsion.	
None	
Commercial fertilizer/a ton or so	
approx 15 ton of fertilizer for 160acres	
none	
I fertilize with 13-16-10 or 18-18-18 fertilizer. About 2.5 tons.	
pelletized fertilizer. 250lbs per acre	
For the past 2 years a great deal of lime. In 2014 2 tons an acre and last year and this 400 pounds per acre.	
A metric ton of chemical fertilizer for grass	
besides farm compost (always 6-8 boxes going year around), green manure seed, ag lime, dolomite with occasional natural suppliments (bone meal, kelp, phosphate sources, boron)	
We can not get enough of compost that is clean, does not pollute our soils and does not cost to much. Bio Solids from the Waste Water Treatment pplant on French Creek does not qualify	
use some lime to sweeten the soil	
lime occasionally and 8 tons 18-18-18 fertilizer per year average	
you wrote "fertilizers" should be "fertilizers" :)	
We only use our own farm produced manure/compost as fertilizers and our herd size has never exceeded our land's needs capacity in manure production.	
300 pounds per acre of nitrogen based fertilizer for grass land and 350 #s per acre of p/k/n mix for corn land.	

misc types 3000bs per acre

we purchase approx. 15 tonne of fertilizer as well as using all our own manure production

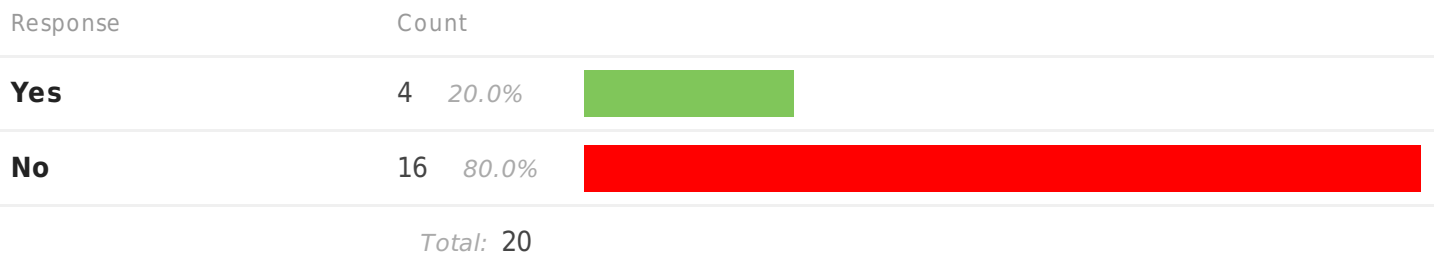
organic only. We use 60-80 cu yards of certified fish compost

nitrogen (lots), lime (1x every 2-3 years)

[question8] Do you use compost as part of your farm operation?



[question9] If you use compost, does the compost come from off site?



[question10] If you use compost, how much compost do you currently use on an annual basis?



n/a

Estimate we use between one and three tonnes.

30-40 yards per year

All that we produce

Several tons of manure

I use some fish compost on my fields, not sure how much we use annually.

1 ton

I use all the composted manure from my horse boarding operation on the hay fields. I don't know the amount, but it is all the economical compost that I have access to.

All of the compost produced by 3 horses and I bring in other horse compost from friends.

10-15 4x4x4 boxes of barn waste compost (not sure weight of it) and related amounts of leaf mulch composted

As much as we can get

@2 tonnes

whatever we produce, we use.

marginal

don't use

40 to 50 cubic yards

about 80 cu yards of fish compost

depending on year and what is produced it is had to say

tonnes

[question13] Do you support the creation of a facility where farmers can take compostable materials to be processed into finished compost that would be available to the farming community in the RDN? Please explain your answer.

Response

Count

23 responses

Yes that would relieve us of manure and moldy hay and make it useful to someone

Would depend on cost and quality of finished product.

I would BUT the problem for us id we would not be able to use your product unless it could be assured not to contain any materials prohibited by the Organic Certification Bodies, so it could benefit the farmers who couldn't be bothered trying to deal with their own waste but would rather just let the RDN or private enterprise do it for them. The certified organic farmers would be left to fend for them selves the same way the have had to for the last 35 years, so if I can help you find a solution to please both organic and conventional then I would make myself available for your needs as best I can.

Yes if it is something farmers think they would use.

No not cost effective

Yes I do support this facility, but I would be reluctant to use compost that has processed animal carcasses, on my fields that produce food for myself or my animals.

Yes what is to explain? I would use it.

I do support the creation of a facility where farmers can take their compostable materials to be processed into finished compost that would be availble to the farming community in the RDN. However, the cost of transport to and from the facility is an important consideration. At present, it doesn't seem economical for a farmer to transport his compostable materials more than a few miles. Residents get their composables picked up for a reasonable cost. Unless farmers get some sort of help with the cost of transport, they will continue to overspread their compostables on their own land with a resulting danger to the acquifers.

no. would be of no benefit to me.

Too much work for me.

not really A sustainable farm practice should be able to use any compostable waste on the farm

Not sure it is necessary. On farm much closer to home. Organic or non-pesticide farmers would not take the finished compost unless ensured of its contents. Why not mix the farm compost that does come in with the other greens that come into the RDN facilities and more generally return the finished product back to the local residents. More people would bring in their grass clippings, leaf piles that end up going over the ravines into creeks etc to the transfer stations if, in return, members of the public could get finished compost by the pailfull or shoveled wagonload. And use the heat of composting to keep the compost facility warm.

NO- every time the RDN gets involved things get complicated in a hurry.

How do you propose to haul that compostable material. Tractors towing an implement are the only affordable option for us- try it sometime to take a piece of farm equipment to a repairshop on Church Road from Hodge's Road .

Finished compost can be used for vegetable gardens and produce enough for sale off the farm. Currently we do not have enough good soil to grow our own hay. We buy now.

Why should our tax money go to what any farmer should have . A corner somewhere to compost compostable material. If you charge to dump and charge to buy and use, why not let private industry do the job. Zone somewhere for the small farm and backyard gardeners to dump .It will be the small scale operations filling their pickups that use it as larger farms can't afford to pay hauling and trucking costs. Right now we have a major problem with people dumping garden refuse on our property even though the municipal dump is a few miles away. People do not want to pay for dumping refuse from their gardens.

I can't see the need for a central composting facility. That would only increase transportation cost and cost for the finished product. Why have to pay for something that everybody can handle easily on site. Exceptions are factory farms on too small land base for their operation to handle the manure produced.

we try to be self sufficient and our farm produces most of nutrient s required for our crops. all depends on cost and convenience, which is also related to costs.

Yes, I think it would help the small farmers have cheap access to compost to use on there crop.

not sure

yes . I believe it would be a good idea but the biggest problem as in the green box program would be the maintaining the quality & integrity of the product.

NO. RDN promote closed loop farming practices as practiced by the Organic sector. Most of the farm operations are small scale (relative to mega farms. Food production at the local level means diverse and small scale farming)

yes as long if it was not too costly

sure, but we would only use it if it were close to us.

[question12] How much volume of finished compost would you use on an annual basis if you had access to it in bulk from a compost facility (assuming it was high quality and reasonably priced)?

Response

Count

21 responses

a small amount for our veggie garden

Several tonnes.

we pay \$50 per yard from Earthbank Resources in Parksville plus the trucking cost of about \$120 per dump truck load (15 yards) and use 3 trucks per year. could use more if it was cheaper, and would like to be buying compost that is actually finished and not still in the process which takes away some of the benefit of adding compost in the first place. I have compared this product to Sea Soil from Port Hardy and it is full of even more unbroken down wood debris that robs the nitrogen component from the compost.

Lots!!!!!! We have at least 20 acres of soil that needs improving.

Lots if the cost was minimal

Probably a lot, if it can be shown that there are no residual antibiotics left in the compost from the animal carcasses.

I don't know that I would want to be paying for it.

The equivalent of 2.5 tons. However, the cost would have to compare favourably with chemical fertilizers and the quality would have to be comparable as well.

N/a

none

none

The term reasonable has to be explained. There is no money to do soil improvements after the farm has complied to all the other stuff from Best Waste Management Plans, Environmental Farm Plan etc. etc.

Difficult to estimate - 1 tonne maybe

none, we lose money as it is.

That would depend on a couple conditions:

- would the compost be Canadian Organic rules compatible as an allowed substance
- what is reasonably priced per tonne in \$\$ trucked to my place?

I probably wouldn't use it annually, but every few years in larger quantity.

unless it is close by, trucking is very expensive, to point of being more costly than value of compost. if it was less expensive than commercial fertilizers, we would be interested, at least for corn crops, which we grow 85 acres of.

don't use compost

not sure

Not the philosophy of organic farming practices.

maybe a ton

we wouldn't. We would use facility to dump our excess.

What are the challenges for establishing a composting facility for farmers in the RDN?

Response

Count

21 responses

unknown possibly biosecurity if carcasses are included

Economic viability, easy access for large transport vehicles, amenable neighbours.

transporting product in a cost effective manner and the right time of year. all farms should be able to deal with their own plant waste no questions asked, maybe a place to deal with animal carcasses or questionable animal waste may be the place to start?

Siting and transportation

transport of large quantities of green matter, or large carcasses

easily accessible sight that won't raise NIMBY complaints from those living close by.

The cost of transportation. If the entire cost is carried by the farmer, he will not be able to afford to use it. Tested, proven and consistent quality would also be important.

Transportation

location and money

mentioned the organic/inorganic farming issue, pretty major, doubtful if it would be cost effective with the transport back and forth from farm and back to farm

The RDN fought Hof Waldeck Farm and Earthbank Resources for over 25 years on that issue, costing us untold amounts of time and money. The Province the Federal Governments have enough rules and regulations to cover all of those issues. We do not need or want an other RDN department managing our needs- get off our backs.

Location - of facility

Transportation - not all farmers have vehicles to carry compost to a facility - pick up and delivery?

Administration - who will operate the facility? Contractor, RDN staff, co-op of farmers?

Specifications for compost accepted - type, volume, etc.

The real problem is not the composting material. It's the non compostable material like plastic wrap on hay and haylage wraps. I recently took a ton of it (it is all food grade plastic wrap by law) to the recycling site as

it was said it could be recycled now. I was refused and told it had to be completely clean. Tell me how giant bags moved around a farm by tractor and full of grass or fermenting silage / haylage sitting outside or even in a barn can not have a bit of dirt and grass on them. There is an environmental charge put on every package of wrap bought but I can not recycle it. The operator said it was only fit for landfill. What a recycling farce! I consider the recycling of non-compostable products to be a far more important issue. I resent the RDN trying to control what farms do. People move to rural areas and then decide they don't want to see or hear or smell what goes on . It seems more and more interference by government is not going to benefit farms at all. A pile of raspberry canes that takes 3 years to rot down or a manure pile that stinks for a month in the summer may be unsightly for someone driving by but if it's not a problem for me the property owner, why should the RDN feel the need to interfere?

sorry, but the idea never crossed my mind as being necessary

centralized location, and local community acceptance.

The challenge would be have the facility in an area that would be easily accessible to farmers in the rdn.

cost

maintaining quality & a fairness around some sort recovery for use

NONE. RDN does not need it.

Cost i believe will be the big factor

The RDN is big and it is not cost effective for us to haul to or from Cedar.

[question14] Any other comments?

Response

Count

12 responses

hope that this idea comes to fruition I love the idea of using farm byproducts for a useful purpose

not yet but I'll work on some

Thanks

almost wondering instead of composting carcasses it would be safer & more economical to incinerate the carcasses, allowing the ashes to become part of the compost. That would add valuable nutrients to the compost, as well as alleviating the problem of residual antibiotics or other harmful microbes. Otherwise the compost has to be hot enough to kill everything.

I have been waiting for a long time to have local compostables available at a price and tested quality that compares with chemical fertilizers. I am concerned about local dairy farmers, for example, spreading manure in quantities that threaten aquifers just because they have no other economical alternative to take care of their excess waste. Meanwhile, I would like to have access to their manure, but the cost of transporting it to my farm does not make it economical. Waste from farmed shell fish would also be very useful for my farm. I have taken shrimp shells and spread them on my field and the increase in productivity was amazing. However, they needed to go through a composting facility first. The smell and flies were offensive to my neighbours.

would this proposed facility run by itself. that is no tax dollars needed to operate it? as a farmer it is important to us that we operate with out tax dollars. so if the proposed facility does the same, even if it is of no benefit to me, maybe it would be helping others.

If you still want to hear more from me here is the Information to contact me.



The timing of this survey will almost certainly make sure, that the voices of the farmers within the RDN will not be represented, since they have other things to do.

A great idea to have a central community owned and operated composting facility for farmers.

I the would like to know the fuel behind this initiative. Is it coming from the 5 acre or less "estate " "farmers " who want everything tidy, tidy or from city dwellers who don't understand farming. Is it coming from "environmentalists" who want to control the environment instead of letting the environment do it's own composting on it's own time on a pile of debris in my corner? Or is it just an initiative to justify jobs in the RDN? In my mind if this is a good and justifiable issue, a private firm could and should be the ones to do it.

RDN should support Organic practices and not create facilities that are counter productive to Organic practices.

great idea to explore

Although we could potentially add compost material to the mix, the best target for selling the finished compost would be gardeners, or vegetable growers.

This would also compete directly with existing fish compost businesses. Do you want to do that?