

### 13 comments on “Biosolids Master Plan”



1. Patrick says:

January 10, 2014 at 2:36 pm

GREAT IDEA! Proud that Winnipeg will get on-board with Eco-Friendly solutions!



2. Sara Jane Schmidt says:

January 13, 2014 at 8:48 pm

Anything that can reuse these materials in an Eco-beneficial way is good news. Go for it!



3. Ahmed says:

January 14, 2014 at 3:18 pm

The major issues with biosolids is the heavy metal content



• Jaroslaw Rudnycky says:

January 15, 2014 at 4:01 pm

‘Biosolids’ in this context are the solids left from sewage treatment. To the best of my knowledge, the average human excretes almost no heavy metals which are stored in the body, unless we’re undergoing chelation therapy, or we’d be dying of heavy metal poisoning or at least suffering from their toxicity. Winnipeggers don’t eat fish from Minamoto Bay.



• admin says:

January 29, 2014 at 3:33 pm

Thanks for your comments Ahmed and Jaroslaw.

Heavy metals in biosolids come from a variety of sources, including industrial and residential. Industrial discharges of metals to the City's sewer system is regulated through the Sewer By-Law.

The City prepares an annual report that is submitted to the Province and includes data on metals content in the biosolids:

[http://winnipeg.ca/waterandwaste/pdfs/sewage/complianceReporting/Biosolids/1089ERR\\_2012.pdf](http://winnipeg.ca/waterandwaste/pdfs/sewage/complianceReporting/Biosolids/1089ERR_2012.pdf)

Although metals are present in biosolids, given the concentrations are relatively low, they are not the limiting factor on land spreading of biosolids.

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4. **Ahmed** says:

January 15, 2014 at 7:24 pm

like we don't flush off other things in the closet?.....

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5. **Ron** says:

January 16, 2014 at 9:47 am

Let's recycle on farm land , it's a good fertilizer.

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6. **Kevin Miller** says:

January 23, 2014 at 3:29 pm

I support all of the listed potential beneficial reuse options for biosolids.

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7. **Alex** says:

January 23, 2014 at 4:48 pm

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The composting program sounds promising. I'd list that as my preferred option.

Landfill is not a preferred option due to elimination of biologically available nutrients.

Other considerations:

Spread biosolids in areas with limited public access (i.e. power corridors) for natural attenuation of metals impacts. Nobody is using the land anyways.

Approach farmers to create land-berms along the edges of their fields for microclimate wind protection of crops during dry summer months.

Glad to see that the City is allowing public consultation. Don't increase our taxes with a half-brained "solution".

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8. **Gary Hammond** says:

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January 26, 2014 at 12:01 pm

The owner of Eco Sciences, LL has developed a newly patent pending solar technology for processing wastewater biosolids ONLY using solar energy, which coverts it into a safe pasteurized fertilizer. This process is called SolarOrganite®.

We are currently looking for municipalities and utilities that would be interested in putting in this newly developed technology. Since this is a new process, we are willing to put in a SolarOrganite® Biosolids Management Facilities at WHOLESale COST ONLY.

We are also open to entering into a Public – Private – Partnership. The total cost of the SolarOrganite® Biosolids Management Facilities can be paid in full using only your current sludge disposal budget. No more capital expenses. No need to increase taxes. Maybe even lower taxes !

The SolarOrganite® process is clean, green and seen as the most cost-effective process.

Gary Hammond, President

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Email: [EcoSciences@gmail.com](mailto:EcoSciences@gmail.com)  
Web Sites: <http://www.EcoSciencesLLC.com>  
<http://www.SolarOrganite.com>

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- Jaroslaw Rudnycky says:

January 27, 2014 at 4:50 pm

Hi Gary,

It's unclear whether or not your company has had a dialogue with Winnipeg Water & Waste regarding your process.

Are you at liberty to provide clarification?

Thanks,

Jerry

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- Gary Hammond says:

January 28, 2014 at 10:21 am

Jerry,

No we haven't had a dialogue with Winnipeg Water & Waste regarding our process. If they are interested, we are open to discussions with them.

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- admin says:

January 29, 2014 at 3:39 pm

Hello Gary, We recommend that Eco Sciences LLC submit technical information to us on their proposed process for treating biosolids. This submission will be reviewed and considered along with information from other potential treatment options during the preparation of the Biosolids

Master Plan. As we are wrapping up the public engagement process, we would need your submission within a couple of weeks.

We will review the treatment options based on the evaluation criteria that have been supported through the public engagement process.

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#### One comment on “Biosolids Public Meetings Questions & Responses”



1. Patrick says:

March 22, 2014 at 11:05 am

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Fantastic!

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#### 6 comments on “Potential options for managing our biosolids – Part 1”



1. Dan Benoit says:

January 16, 2014 at 12:21 pm

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Hi. Would like to change my vote on thermal oxidation from somewhat oppose to strongly support. Also, each option will cost taxpayers something. So the cost of electricity should not be an issue. Generate electricity and what ever you get offsets the program. Thanks

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2. Mark Burch says:

January 16, 2014 at 1:40 pm

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Of the options offered, my first preference would be for composting, and second for land application. No proposal should be adopted that effectively destroys the valuable resources available in biosolids.

I wonder, however, about the viability of using a pyrolysis process? Pyrolysis can be implemented at any scale. It is self-sustaining in terms of the energy required to maintain the process after start-up. It produces no nuisance odours. It has the virtue of producing a methane-like gas byproduct which can be used to fire the process itself, plus a deisel-like distillate that can be used to fuel vehicles, run

co-gen units, etc. Pyrolysis units could be installed right on the premises of water treatment plants, thus eliminating the need to transport solids. Most attractive, it also produces biochar which is nearly pure carbon, an excellent soil amendment, and a substance which, once incorporated into the soil, actually sequesters carbon from the atmosphere. The carbon sequestration properties of biochar might offer the possibility of selling these carbon credits on the open market and help to partially finance the operation. Today, there are many bogus “carbon offset” schemes that avoid emissions but don’t actually sequester carbon. Pyrolysis actually sequesters it.

My final thought is just the suggestion that your consultation process try to consider the costs and benefits of various options using the assumption that Manitoba Hydro didn’t exist. Our artificially depressed energy prices create a sort of black hole that warps light coming from every direction in this province. We do enjoy a hydro advantage in Manitoba. But I think the opportunity cost is unacceptable if we assume that we will always have this advantage under regimes of a changing climate. We may find instead that energy prices across the board become more volatile and supply interruptions more frequent. In such circumstances, it would be prudent to distribute risk across several initiatives or interventions each of which is viable on its own merits in the long run, even though the hydro advantage we now enjoy makes them appear relatively uncompetitive in the short run.

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• **Peter Miller** says:

January 23, 2014 at 4:06 pm

Here’s a reference for Mark’s pyrolysis option.

[news.cnet.com/8301-11386\\_3-57608281-76/carbon-negative-energy-a-reality-at-last-and-cheap-too/](http://news.cnet.com/8301-11386_3-57608281-76/carbon-negative-energy-a-reality-at-last-and-cheap-too/)

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• **admin** says:

January 29, 2014 at 2:38 pm

Thank you both for your comments and providing us a reference on the pyrolysis process. We have reviewed the reference provided as well as looked at what is being done world-wide. While it is generally recognized that pyrolysis is an established technology in some industrial applications, pyrolysis of sludges and biosolids is currently considered an innovative technology and has limited application for municipal biosolids.

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An important criterion in developing the Biosolids Master Plan is that processes considered must have a demonstrated track record in municipal applications of similar size. While the pyrolysis process shows promise for future energy recovery, it cannot be considered a viable option at this point in time.

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3. **Peter Miller** says:

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January 23, 2014 at 4:24 pm

It can be helpful to look at all organic waste stream components together and look for linked solutions rather than segment by segment. For example, by about this time, the City was supposed to initiate a green bin kitchen waste pickup and recycling project. Note that biosolids are products of anaerobic digesters that produce biogas. New York City has recently initiated a project to add a kitchen waste slurry to sludge digesters to produce more biogas. Whatever biogas is not needed to heat the facility can be refined sufficiently to inject into Centra's system. See [cleantechnica.com/2013/12/28/food-scrap-recycling-joins-wastewater-treatment-in-new-nyc-project/](http://cleantechnica.com/2013/12/28/food-scrap-recycling-joins-wastewater-treatment-in-new-nyc-project/).

Note that Fortis BC (previous employer of Hydro's CEO Scott Thomson) markets "renewable natural gas" from such injections and permits customers to pay a \$5/month premium to "green" their heating by this means. This serves as a partial financing source for such an initiative.

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4. **Cheron Long-Landes** says:

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January 26, 2014 at 10:41 pm

Having lived many years in Germany, I am familiar with green bin kitchen waste being turned into compost for the public to buy back. (Toronto and the GTA is also following this system now.) This is one way of reclaiming some of the costs. I strongly feel it would be better for the city of Winnipeg to not go the cheaper route and really follow a longer-term initiative. Re-cycling IS the way for the future, and yes, the public will have to pay towards it. Which also means that they will be more selective about what gets recycled, and NOT just throw everything in the garbage as they are used to doing. Educating the public is sorely needed as far as I'm concerned. Unless everyone works together to make this work for the city, it will end up costing the taxpayer even more than is reasonable. It is up to the Government to demand of the manufacturers that less packaging be used in production, thus reducing the amount of paper and plastic that lands in the recycle plants. This probably wouldn't suit them, due to oil being a big source of income and what is plastic made from??

It seems ridiculous, with the destruction being caused by the oil sands that we are even contemplating the environment! Perhaps that's why so many just don't care, or is it ignorance? Which goes back to education. Just don't add more of an odour problem to the air in Winnipeg and surrounding areas!

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