

14 comments on “Biosolids Land Application”



Don Vincent says:

June 28, 2017 at 9:06 am

Spreading a city's toxins on farmland is a really BAD idea. Prominent Scientists and Universities outline the Dangers of Biosolids –

Yale – <http://pubs.acs.org/doi/full/10.1021/acs.est.5b01931>

Cornell – <http://cwmi.css.cornell.edu/case.pdf>

Canadian Scientists – <http://bit.ly/1sb2qOP>

UK Scientists- Aberdeen / Glasgow Universities – http://www.wte-ltd.co.uk/sewage_sludge_biosolids.html



admin says:

July 4, 2017 at 11:24 am

Hi Don,

Thank you for your comment.

Emerging substances of concern (ESOCs) such as pharmaceuticals, antibiotics, etc. in biosolids continue to be studied in Canada and around the world.

In 2015, a [comprehensive literature review](#) was conducted by Ryerson University on the risks associated with biosolids land application in a Canadian context.

The report summarizes the risks of ESOCs and pathogens in biosolids after application to agricultural land, in conditions relevant to Canada.

The City's Biosolids Land Application program will follow all of the provincial and federal regulations to protect human and environmental health, including the Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines, the Manitoba Water Protection Act and Nutrient Management Regulation.

The City's Biosolids Land Application program includes mitigation measures for ESOC's, such as;

- Degradation from climate exposure
- Degradation from microorganisms
- Degradation from sunlight
- Setback distances from water bodies, groundwater features and residential areas
- Restrictions on type of crops planted for three years following application
- Restriction on cattle grazing for three years following application
- Separation in time from land application to harvest
- Monitoring the ongoing research



Laurinda Richard says:

July 5, 2017 at 10:34 am

Well its a sad day for the citizens of Winnipeg when the spreading of this terrible product begins, I do not and never will understand the reasoning behind this, You people should know better, you are not putting something safe back into the environment you have only found a legal way to dump toxic waste, I have friends and family living in that area, I wouldn't wish this upon my worst enemy, Take a hard look at the misery it has caused in other provinces, mostly your rural citizens who have to live near or beside fields that have this type of land application.the unlawful use and dumping of this substance in fields and then crops for human consumption being grown in them, I don't want to eat this Crap on or in my food.. Really people!! We have serious issues in rural areas where this dumping is happening there are health problem near and around these dump sites, ground water contamination run of into rivers and streams.. The process used to cure this crap DOES NOT REMOVE ALL THE TOXINS,or Heavy metals or whatever chemical compounds remain. What is left behind becomes the issue and the build up of these same toxins with continued applications, Where The HECK DO YOU THINK THESE THINGS DISAPPEAR TO?? They seep into ground water, which by the way rural citizens drink the ground water(its called wells) it doesn't come from the grocery store in a bottle. Heavy metals and chemical compounds don't just go away they collect in the soil, and become more and more with repeated applications yes some are absorbed by food crop plants. Hey guess what we eat food crop plants they grow in the ground don't they?..Legal poisoning of the citizens.. SHAME SHAME



admin says:

July 12, 2017 at 10:53 am

Thank you for your comment.

Please join us at our open house event on July 12 to discuss the biosolids land application program. The open house details are listed at the top of the website. If you have concerns about the program, please contact us at 1-888-882-3391 or BiosolidsLandApplication@winnipeg.ca. You can also provide feedback directly to Manitoba Sustainable Development, the regulator for the program, once the proposal for the environmental licence has been submitted in the fall [on their website here](#).

The biosolids land application program will follow all applicable provincial and federal regulations for the protection of human health and the environment. In addition, the program will operate under an Environment Act Licence from Manitoba Sustainable Development, which will be specifically issued for this program and will outline detailed requirements for application, soil sampling and monitoring.

The biosolids land application program includes the following environmental management practices:

- Selection of appropriate land for application
- Testing of biosolids for nutrients and metals
- Testing of soil at the receiving sites for nutrients and metals
- Application rates based on site specific conditions
- Requirements for application to take place at specified minimum distances away from homes, wells, water bodies, etc.
- Mandatory waiting periods after application before crops can be harvested or livestock allowed to graze
- Soil monitoring for 3 years following application



Jim Poushinsky says:

July 11, 2017 at 2:11 pm

Re: Public participation in proposed sewage disposal for Winnipeg. (Thinking outside the questionnaire box!)

Dear Mayor and Councillors of the City of Winnipeg,

Here are the 7 most important facts missing from the government and trucking and agricultural industry pro-spreading sewage propaganda:

1) the fact that the finished sludge contains antibiotic resistant super-bugs and their DNA plasmids created in the treatment process by exposure of all the germs from sick people to weak doses of all the antibiotics used to treat them. These DNA plasmids remain in the environment and are a likely cause of the growing antibiotic resistant disease outbreaks closing hospital wards during the spring and fall sewage spreading on farmland.

2) the fact that the finished sludge contains dementia causing prions that are not inactivated by heat treatments of less than 1000 degrees Celsius and that persist indefinitely in the environment. Such prions are 100,000 times more infectious when breathed than when ingested (as in the spread of CJD from eating Mad Cow) and are being breathed in dusts from sewage spread fields whenever the wind blows. This is a smoking gun for the 5 million cases of epidemic fatal dementias now afflicting North America.

3) the fact that some 90,000 chemical compounds from households and industry comprise 30% of the sewage sludge by dry weight. These mostly untested chemicals interact and breakdown in the environment to produce more unknown chemicals. It would take billions of dollars of scientific research over decades to determine the safety of these chemicals with regard to human and animal health and the environment. Meanwhile it only takes one cell in a body to be adversely affected to cause cancer in an individual. How can the spreading of such a high quantity of unknown and untested chemicals on rural lands where they are contaminating the soil and food chain and leaching into ground and surface waters and blowing in the winds not be an unacceptably high risk for cancer and auto-immune diseases?

4) the fact that when sludge is routinely applied at the rate to meet the nitrogen fertilizer content for corn there is 4 to 5 times more phosphorus in the sludge biosolids than the corn can uptake. This excess phosphorus leaches into the surface waters and is a major cause of the algae growth that is poisoning our lakes and contaminating drinking water.

5) the fact that sewage sludge biosolids in storage and after spreading on fields emit methane and nitrous oxide gases that are respectively 80 and 300 times more heat retentive than carbon dioxide in causing global warming. Disposing of all sewage in gasification or pyrolysis facilities where such gases are converted to CO₂ while beneficially generating heat and electricity would significantly reduce greenhouse gases while protecting our health and the environment.

6) the fact that spreading biosolid sewage sludge with its extremely high pathogen loading (up to 2 million e-coli permitted per half cup as markers for all the other pathogens!) and its multitude of unknown chemicals would not be permitted under the federal Fertilizer Act if the Canadian Food Inspection Agency was allowed to enforce the Act. Officials have long insisted that the Fertilizer Act only applies to products sold as fertilizer, therefore it is given away for free. This despite the Act having been amended to state it applies to any product “distributed as fertilizer”. See http://www.oag-bvg.gc.ca/internet/English/pet_306_e_35204.html

7) the fact that the federal and provincial Departments of Health are using “risk management” as an excuse to avoid intervening to protect the health of rural people by claiming that those living in affected rural areas are less than 5% of the population and therefore problems arising from sewage spreading cannot cause an epidemic and therefore are not worth researching. This is a clear violation of the equality rights of rural Canadians, who are being denigrated to second class citizen status by such policy. See <http://unpublishedottawa.com/letter/41217/submission-ccme-sewage-biosolids-discussion-phase-2-ottawa-citizens-against-pollution>



admin says:

July 19, 2017 at 1:36 pm

Hi Jim, thank you for your comment.

The biosolids land application program will follow all applicable provincial and federal regulations for the protection of human health and the environment. In addition, the program will operate under an Environment Act Licence from Manitoba Sustainable Development which will be specifically issued for this program and will outline detailed requirements for application, soil sampling and monitoring. The biosolids will be applied at agronomic rates outlined in the *Manitoba Nutrient Management Regulation*, which are based on the nutrient content of the soil and the crop requirements.

Comments can also be provided directly to Manitoba Sustainable Development, the regulator for the program, once the proposal for the Environment Act Licence has been posted on their website for comment.



Monique Choiselat says:

July 12, 2017 at 1:53 pm

bio-waste from carnivore or omnivores cannot be safely used as fertilizer. That is why dog and cat feces are removed from your lawn, they will kill it. There are too many toxins and contaminants in this kind of waste. Do not do this. Even herbivore bio-waste has to be left for several months before being used for fertilizer. Fertilizer can only be safely used once it has broken down to a safe usable state.



admin says:

July 19, 2017 at 1:40 pm

Hi Monique,

The City is not applying raw sewage, manure or animal waste. Biosolids are a treated solid by-product of sewage treatment. At the North End Sewage Treatment Plant (NEWPCC), all of the City's wastewater sludge is treated in a biological digestion process for approximately 15 days, to stabilize the solids and reduce the pathogens. The treated solids are called 'biosolids'. Please visit the City's [Sewage Treatment Plants](#) webpage for more information on the sewage treatment processes.

Biosolids land application is regulated by provincial and federal legislation, and the program will operate under an Environment Act Licence from Manitoba Sustainable Development.



Monique Choiselat says:

July 12, 2017 at 1:58 pm

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Main reason for not using fresh manure is that it burns any plants it touches because of the high ammonia (nitrogen) content. Bit like when your dog pees on the lawn the grass dies. However, if you're going to leave beds empty for a couple of months there is no reason not to top dress them with fresh manure and leave it to rot down in situ, or let the worms pull it down into the soil.



admin says:

July 19, 2017 at 1:43 pm

Thanks for your comment,

The City is not applying manure. Biosolids are a treated solid by-product of sewage treatment. At the North End Sewage Treatment Plant (NEWPCC), all of the City's wastewater sludge is treated in a biological digestion process. The treated solids are called 'biosolids'. Please visit the City's [Sewage Treatment Plants](#) webpage for more information on the sewage treatment processes.

We have an accredited laboratory test the biosolids for a variety of parameters to ensure they meet applicable regulations. Please visit the City's [monitoring and licensing](#) webpage for more information on the analysis of the biosolids.

The biosolids will be applied to fields after the crops are harvested, in the late summer or fall. The biosolids will be spread over the surface of the field and then worked into the soil. The biosolids will be applied at agronomic rates outlined in the *Manitoba Nutrient Management Regulation*, which are based on the nutrient content of the soil and the future crop requirements. Crops will be planted the following spring, with restrictions on the kind of crop that can be grown.



Caroline Snyder says:

July 15, 2017 at 5:36 pm

The Winnipeg Metropolitan area, with a population of 80,000, is located on a flood plain. The area experiences major floods and sewage overflow problems, that may no longer be partially contained because of the more severe rain events resulting from climate change weather patterns. Safely managing this city's sewage is already challenging with cleaning and repairing the many pipes and lift stations.

Spreading 5000 wet tons of the city's biosolids on land is hardly a small pilot project. Sewage sludge generated in large industrialized urban centers is a complex, unpredictable, and biologically active mixture that contains not only superbugs, but thousands of synthetic chemicals, many of which are highly toxic, persistent, bioaccumulate in soil, and adversely affect organisms in parts per trillion. Most are not regulated or tested. For a partial list of toxic chemicals that can legally be discharged

into US sewage treatment plants, see US researchers have stated that such sludge is probably the most pollutant-rich mixture of the 21st century. US and Canadian liquid waste streams do not substantially differ.

Land applying Winnipeg's biosolids is especially risky because of the many hospitals, health care centers and laboratories that discharge their pathogenic and chemical wastes into the sewers. City Reeves should be particularly concerned about the legal or accidental discharges from the city's Containment Level 4 National Microbiology Laboratory. Here scientists research the most deadly infectious diseases, including Ebola. No current treatment plants can deactivate these infectious agents. Some of them would end up in the treated water, but most, concentrate in land-applied sewage sludge.



admin says:

July 25, 2017 at 2:39 pm

Hi Caroline, thank you for your comment.

Biosolids have been studied for decades and the research into biosolids, the effects of land application, and emerging substances of concern continues in Canada and around the world. Scientists, health experts and agronomists continually review regulatory requirements and standards for biosolids land application to verify that they protect food safety, human health and the environment.

The City of Winnipeg regulates discharges from laboratories using the [Schedules of Sewer By-law 92/2010](#), and many industries are monitored through our [Pollution Prevention Program](#). In many cases, pretreatment facilities have been built to comply with the Sewer By-law prior to disposal in the sewage treatment system.

Facilities that handle bio hazardous waste treat the hazards by autoclaving or incinerating anything that comes into contact with the pathogens of concern. The incinerated material is not disposed into the sewage treatment system.

The biosolids land application program will follow all applicable provincial and federal regulations for the protection of human health and the environment. In addition, the program will operate under an

Environment Act Licence from Manitoba Sustainable Development which will be specifically issued for this program and will outline detailed requirements including those for application, soil sampling and monitoring.

Comments can also be provided directly to Manitoba Sustainable Development, the regulator for the program, once the Environment Act Proposal has been posted on their website for comment.



Nick hayward says:

September 15, 2018 at 5:29 pm

Hello,

It's been a while since I've heard anything about this project from the city. Recycling biosolids is very important and absolutely critical to our future sustainability. Winnipeg needs to get its act together and follow Edmonton's example for recycling and composting. I'd rather have human biosolids on farm fields, than dumped raw into the Red River.

I'm putting together a back yard garden next spring, will I be able to have the city drop off a few cubic yards at my house? Or will it be available for pick up? Thanks.



admin says:

September 25, 2018 at 3:02 pm

Hello Nick,

Thank you for your comment. At this time, the biosolids compost and soil products are not available to the public. The City is currently implementing three beneficial reuse strategies for biosolids:

1. Composting – In May 2015, the City began a pilot project to compost a portion of the biosolids. The biosolids compost is used for top cover at the City's landfill sites.

2. Land Application – In fall 2017, the City applied approximately 2,600 wet tonnes of biosolids to farmland to complete phase two of land application program. The City is currently in phase three,

which is a three year program to apply up to 20,000 wet tonnes of biosolids per year.

3. Soil Fabrication – In spring 2018, the City began a three year pilot project to use a portion of the biosolids and other residuals for soil fabrication. The soil is used as a top cover at the Summit Road landfill.

Annual updates on these projects can be found on the Manitoba Sustainable Development website: <http://www.gov.mb.ca/sd/eal/registries/963.2/>.

The remaining biosolids are disposed at the Brady Road Resource Management Facility.

The City has a separate program to compost leaf and yard waste. For more information on the leaf and yard waste compost program, please visit <https://winnipeg.ca/waterandwaste/yardWaste/default.stm>

Thank you for your interest in our biosolids program.