

Biosolids FAQ

October 2009

What are biosolids?

They are an organic resource. They are rich in nutrients and help crops, trees and greenery grow. They are produced through an impressive recycling process: sludge from waste water facilities is transformed into a useful, soil-enhancing material. The harmful bacteria are decreased, and analysis is now very strict for chemicals such as furans, and fire retardants.

What is the difference between biosolids and sewage?

Biosolids are a completely different, and useful organic resource. Treatment plants can transform sewage into useful biosolid material through chemical and physical processes: PH levels are increased, heat is added, the water removed and the result is a dry, nutrient- rich fertilizer called biosolids.

How can biosolids be used?

They can be used to help things grow, in forestry, in agriculture, or in cover for reclamation sites. Producing biosolids is a good way to keep sewage sludge from treatment plants out of our environment.

Is land application of biosolids safe?

Yes, when proper guidelines and regulations are followed. Biosolids **do not** pose a health risk to individuals, crop production, or the environment.

Are biosolids applied to land in other places?

Biosolids are applied to land, including forestry and farm land, in almost every province in Canada and many states throughout the United States. It has also been applied to land for many years in European countries and numerous other places throughout the world.

Can biosolids be applied to farmland?

Yes, but only the highest quality biosolids that meet strict chemical and biological quality standards — and our guideline revisions ensure that strict standard. Any biosolids that do not meet these high standards cannot be applied to farmland in Nova Scotia.

Why are we changing the guidelines for land application of biosolids?

Some concerned Nova Scotians requested action — We listened and responded. An independent committee of concerned citizens, experts, and govt representative was formed, gave recommendations to improve practices, and all recommendations will be implemented. (Many implemented via the guidelines, others implemented in other ways in govt.)

What are the major changes in the Guidelines?

The major changes in the Guidelines include:

There is more intensive testing required for contaminants, such as dioxins, furans and fire retardants. This was not required in the past, and speaks directly to concerns raised by Nova Scotians.

Treatment plants that produce biosolids face more stringent product quality standards, and require Environmental approvals.

The levels of standards – or ‘classes’– of biosolids are simplified so treatment plants can better follow them. This makes the guidelines consistent with the province’s Compost Guidelines.

Only Class A biosolids ---the highest quality material– can be used on farms,. Class B biosolids, the lesser quality material, can not be used on agricultural land. Class B biosolids can be used on other lands but only if the department of Environment issues an approval.

On September 18th, Ontario released new rules for nutrient use including biosolids. How does our approach compare to Ontario?

Ontario’s approach is similar to the approach we are taking with the revised Guidelines. The focus of both provinces is based on quality of material and establishing high environmental standards. In some places, we have placed greater quality requirements and more restrictions on land application of biosolids than Ontario.

Will there be an odour when the biosolids are spread on land?

That should not be a problem when biosolids have been properly treated to a high standard and managed properly. The revised Guidelines provide for proper odour control during storage and application. They also recommend setbacks from public places and buildings to minimize the risk of odours.

Is it safe to eat food that was grown on soil where biosolids were applied?

Scientific research has not confirmed any link between the use of biosolids on farmland and food safety. When biosolids are managed according to guidelines, there are negligible risks to the environment, human health or food safety.

Are there metals in the biosolids?

Trace amounts of metals, such as lead, copper and zinc, can enter wastewater. In small amounts these metals are actually required for plant growth and can improve crop yields. There will be regular testing for metals in biosolids, to prevent levels from exceeding guidelines.

Will the public be notified of the spread of biosolids?

They will not produce odour or significant risk to the environment or health, so – no. Biosolids will be treated like other fertilizers, such as animal manures, commercial fertilizers, and composts, where public notification is not required.