

Nutrifor Metro Vancouver Biosolids Program

Metro Vancouver recycles treated sewage safely and responsibly to create Nutrifor, a fertilizer made from biosolids. Adding biosolids to land provides valuable nutrients and builds healthy soils.

What are biosolids?

Biosolids are a non-chemical, slow release alternative to conventional chemical fertilizer produced from sewage solids that have been treated to eliminate harmful bacteria. The final product is an earth-like material that is high in nutrients and organic matter.

How Nutrifor is used

Metro Vancouver uses Nutrifor at its own facilities and parks. It also partners with regional districts, ranchers, mine operators and others around the province to use Nutrifor to:

- rebuild soil and re-introduce vegetation to mine sites and gravel pits
- fertilize rangeland, hayfields and forests
- make high-quality topsoil for landscaping and landfill closures
- create a soil that is placed on landfills to absorb methane gas and reduce greenhouse gas emissions

Building healthy soil

Using biosolids returns valuable organic matter and nutrients to the soil. Studies by Agriculture Canada and the Ministry of Forests show that fertilizing land with Nutrifor improves vegetation growth, builds soil and supports the microorganisms needed for healthy plants and soil.



Nutrifor-based landscaping at the Naturescape Garden, Vancouver Landfill



New spruce tree growth in biosolids-enriched soil (top) and regular soil (bottom)



Biosolids transform Aldergrove Lake gravel pit into Metro Vancouver regional park

Quality control

To produce Nutrifor, Metro Vancouver follows a rigorous quality control program that exceeds provincial regulations. This process starts before biosolids are created, by regulating what industry can send to the sewer. We do this through a sewer use bylaw that is enforced by a team of regional officers.

Testing and monitoring

Throughout the treatment process, we test the wastewater that will be turned into Nutrifor. Once Nutrifor has been produced, it is tested again before it leaves the plant. This testing confirms that Nutrifor meets regulations and can be used on land. Test results show that Nutrifor is consistently within the limits established by the Ministry of Environment.

A site-specific approach

Before Nutrifor is applied to land, Metro Vancouver looks at each site individually and works with experienced, qualified professionals to develop a plan that is tailored to that site. The site is tested before Nutrifor is added to determine the needs of the site. Depending on site conditions, additional monitoring is done to ensure environmental protection.

Continuous improvement

Metro Vancouver is always looking for opportunities to increase its knowledge and continuously improve. Since its start in 1991, the Nutrifor program has been involved in numerous studies and research projects, which has helped Metro Vancouver to refine its practices.

In 2010, Metro Vancouver received the Excellence in Biosolids Management Award, which recognizes innovative leadership in biosolids management in the Pacific Northwest.

Find out more

Metro Vancouver
604-432-6200
www.metrovancouver.org (search: biosolids)



Monitoring to ensure biosolids comply with regulations



Testing carbon content in soil after use of Nutrifor



Applying Nutrifor to a hayfield