

Biosolids – Holding Lines

[water authority] treats biosolids in line with the stringent regulatory requirements set by the EPA and additionally follows a robust set of Environmental Management Systems and Quality Management Systems to further reinforce the strong level of safety and risk minimisation in place.

Testing of biosolids treated by [water authority] is conducted by an independent laboratory certified by the National Association of Testing Authorities (NATA).

Questions & Answers

What are biosolids?

- Biosolids are a byproduct of the sewage treatment process that are further treated to significantly reduce pathogens and volatile organic matter.
- Biosolids comprise dead microorganisms, a small portion of active microorganisms and inert solids, such as sand, which have entered the sewer.
- Biosolids can only be used and applied in accordance with strict regulatory requirements.

How are biosolids produced?

- Biosolids are produced as a normal process within sewage treatment plants.
- During sewage treatment, microorganisms digest the sewage, breaking down organic solids discharged into the sewerage system. This produces a wastewater and a solids component. The water content of the solids is reduced through mechanical processes and the resulting product is biosolids.
- [water authority] carefully treats biosolids using some of the most advanced wastewater treatment and biosolids production technology in the world. A robust quality assurance program is used to ensure the quality of the final product.

Does [water authority] test biosolids for pathogens including Blastocystis hominis and D. Fragilis?

- There are a significant number of different organisms that can cause disease in humans and it is not practical to test for every one. [water authority] tests for pathogen indicators (E. coli and Salmonella) to determine if treatment has been effective, in line with international practice and EPA guidelines.

Is [water authority] aware of any cases of illnesses directly caused by biosolids?

- There is no evidence that biosolids treated by [water authority] in line with EPA requirements have had negative human health impacts.

Can pathogens be transferred from biosolids to humans and therefore pose a public health risk?

- Biosolids that are treated and used in accordance with EPA requirements do not pose a risk to human health.

How is the use of biosolids regulated?

- EPA sets strict guidelines for the use and application of biosolids which [water authority] adheres to at all times. Australia has one of the strictest regulatory regimes for biosolids application and use in the world.
- In line with EPA requirements, [water authority] prepares and follows a comprehensive Environmental Improvement Plan (EIP) for each biosolids land application. This plan prescribes specific measures to be taken for each application to ensure there is no human health risk or environmental impact.

What industry protocols are in place to manage biosolid use?

- [water authority] utilises a quality management system for all practices such as handling, storage and use of biosolids.
- A key aspect of this management system is that biosolids are stored for a minimum of three years prior to use to ensure that pathogens are destroyed.

Are food and ingredients fertilised by biosolids safe for human consumption?

- Biosolids treated and used as fertiliser in accordance with EPA guidelines would pose no greater risk than other organic fertilisers to human health.

How many tonnes of biosolids does [water authority] recycle yearly?

- In XXX–YY [water authority] recycled x,xxx tonnes of biosolids.