

There is great fertilizer value in Class A Biosolids. In many cities/states, it is bagged and given or sold to customers with great success. A definition of Class a Biosolids is as follows:

Class “A” biosolids contain no detectible levels of pathogens (disease causing organisms) and can be applied without restriction (“unrestricted use”).

Biosolids are non-hazardous and non-toxic. The treatment and the reuse of biosolids are carefully monitored and can only be used in strict accordance with regulatory requirements. Land applied biosolids must meet special federal (40 CFR Part 503) and state standards. The Part 503 rule governs the use and disposal of biosolids and contains numerical limits for metals, pathogen reduction standards, site restrictions, crop harvesting restrictions and monitoring, record keeping, and reporting requirements for land applied biosolids. There are similar requirements for surface disposed or incinerated biosolids.

Experience by those who have permitted and operated hundreds of sites over the past 20+ years is that many people initially have understandable concerns about the concept of biosolids recycling. However, given more information and opportunities for discussion, most find a level of comfort. They come to trust the findings of the National Academy of Sciences, USEPA, USDA, FDA, university researchers across the continent, and every state environmental agency in the country - that biosolids use on soils, in accordance with regulations, presents negligible risk.

This FAQ section attempts to answer some of the most frequently asked questions relating to Biosolids.

Q: – Where Do Biosolids Come From?

A: – Each of the households the District serves generates wastewater by washing clothes, washing dishes and putting waste into garbage disposals, taking showers and baths, and flushing toilets. All this water, combined with soapsuds, food particles, toilet paper, and other materials is transported to the District’s wastewater treatment plant. The wastewater treatment process separates these solids from the water and the solids are further processed and treated until they become biosolids.

Q: – What Is The Difference Between Biosolids And Sludge?

A: – Sewage sludge is made from deposits collected after primary and secondary treatment. Biosolids are sewage sludge that has been carefully processed and tested according to Federal and State regulations and to meet stream water quality standards.

Q: – How Are Biosolids Generated And Processed?

A: – The District’s 3.9 million-gallon-per-day treatment plant treats the wastewater to remove pollutants. The first stage of this process is mechanical: screening, skimming, and settling. The second stage is mostly biological. Microorganisms in the water “eat” the wastes, turning them into the natural, mostly organic material. When this material is further treated, it is called biosolids.

Q: – Why Are Biosolids Recycled?

A: – Biosolids recycling is the best means of returning nutrients and organic matter to the soil that were originally removed in agricultural products and consumed by the public. It is recycling a resource, just like recycling newspapers or bottles. When the proper use is followed, biosolids use can be environmentally protective and even beneficial. Aside from reuse, the other option for the disposal of biosolids contributes to the depletion of our natural resources. Landfills are quickly disappearing. More than 1,200 of the existing 1,500 landfills in the United States have closed because of the increased cost of meeting environmental requirements and many more are running out of space. Keeping biosolids out of landfills and placing them where they can be beneficially used helps reduce the landfill shortage problem.

Q: – Why Is Land Application Of Biosolids Beneficial?

A: – Farmers and gardeners have been recycling biosolids for ages. Biosolids are used to help grow crops, fertilize gardens and parks, and reclaim mining sites. Biosolids add organic matter to the soil increasing water holding capacity and slowing the release of nutrients for crop uptake. The result is better crops, less water runoff, less soil erosion, and more water conservation. Biosolids recycling is a safe, reliable, and cost-effective method for managing biosolids.

Q: – Are There Pathogens In Biosolids?

A: – Yes, because biosolids are a product of the wastewater treatment process. Most of the pathogens (harmful micro-organisms) are destroyed during the collection and treatment of wastewater, and most of the remainder through the solids treatment process. Because most pathogens cannot multiply outside living hosts, there is no risk to human health or the environment when used according to regulations and guidelines.

Q: – How Are Biosolids Treated To Kill Pathogens?

A: – Every wastewater treatment facility is different. At the District, wastewater flows through aerobic and anaerobic conditions to promote microbial decomposition of pathogens. Solids separated from these processes are then aerobically digested.

Q: – Are Biosolids Regulated?

A: – Prior to land application, biosolids must meet strict regulatory and quality standards established by the federal and state governments. The rules that govern the use of biosolids contain numerical limits for metals in biosolids, pathogen reduction standards, vector attraction reduction, site restrictions, crop planting and harvesting restrictions, and monitoring, record-keeping and reporting requirements for land-applied biosolids.

Q: – Do Biosolids Have An Odor?

A: – Biosolids may have a different distinctive odor depending upon the type of treatment it has been through. Some biosolids may have only a slight odor, while others have a stronger ammonia odor. If the biosolids are thoroughly digested at the wastewater plant, the odor is usually that of a moist soil. The odor from biosolids comes from the decomposition of organic material. Compounds that contain sulfur and ammonia, which are both plant nutrients, cause most of these odors, which can be successfully mitigated through proper treatment and operations.