



## Frequently Asked Questions

### **What are biosolids?**

Biosolids are a product of the wastewater treatment process in which organic solids are settled out of water with the help of numerous microorganisms. This organic material is sent to temperature-controlled digesters where microorganisms break it down in a process similar to composting. As with compost, the digestion process converts nutrients into forms that plants can use, kills pathogens, and reduces odors. After digesting, biosolids are aged and air-dried, which further reduces odors.

### **Are biosolids safe?**

Yes, biosolids are safe for use as a plant fertilizer. As with chemical fertilizers, there are guidelines on how they should be used. The U.S. Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA) regulate the use of biosolids to protect human health and the environment. The National Academy of Sciences has recently reviewed current regulations, practices, and public health concerns. They concluded that the use of biosolids in production of crops for human consumption when practiced in accordance with existing federal guidelines and regulations is safe to the consumer, to crops, and to the environment.

### **Where can biosolids be used?**

Biosolids can be used almost anywhere chemical fertilizers would be used. Examples include golf courses, athletic fields, parks and recreational facilities, agricultural fields, forests, and for restoration of strip mines and other disturbed lands.

### **What do biosolids look like?**

Air-dried biosolids look and feel like dark, fine-textured topsoil.

### **Do biosolids have any odors?**

Fresh biosolids can have a compost-like odor or smell like organic fertilizer. They may have a slightly musty or ammonia odor due to the presence of sulfur and ammonia-containing compounds - and that's a good thing since both are plant nutrients. The odor dissipates within a short time after land application.

### **Can biosolids affect water quality?**

Yes. Using biosolids instead of chemical fertilizers can help improve and protect water quality. They help prevent erosion and are less likely to release nutrients into rivers and streams than chemical fertilizers.

### **Are there any restrictions on public access to sites where biosolids have been used?**

There are no site access restrictions for locations where the Metropolitan Water Reclamation District of Greater Chicago's (MWRD's) aged, air-dried biosolids have been applied. Some of the most popular parks and public spaces in Cook County, such as the Chicago Riverwalk in downtown Chicago, have benefitted from landscaping with biosolids.

### **Are there restrictions on how and where biosolids can be used?**

There are specific guidelines for land application of biosolids, just as there are guidelines for use of common chemical fertilizers. Our biosolids experts are available to provide technical guidance and answer questions about your particular project.

## **Why are biosolids used in agriculture?**

Biosolids work, so farmers use them. In addition to supplying the nutrients plants need, biosolids improve tilth and texture, water retention and physical properties of soil that help make plants thrive. Biosolids also provide trace elements such as calcium, copper, iron, magnesium, manganese, sulfur and zinc, which are necessary for healthy crop production and growth.

## **How are biosolids regulated?**

Biosolids are regulated at both the federal and state level, and they must meet several quality standards and regulations. These standards include limits for metals that may exist in biosolids, site restrictions and pathogen standards, as well as monitoring and record-keeping requirements. The MWRD is committed to producing biosolids that are safe for humans and the environment and has an excellent record of compliance.

## **Do I need a permit to use biosolids?**

No. The MWRD has permits to provide biosolids to qualified users.

## **Could I use biosolids in my yard?**

Currently there are some restrictions. Contact the MWRD for additional details.

## **How much biosolids should I apply?**

As with chemical fertilizers, biosolids should be applied according to what your plants need. MWRD soil scientists are available to visit your site and produce a custom application plan.

## **How can I get biosolids?**

Call the MWRD to arrange a free consultation with one of our soil scientists. Our experts can visit your site, evaluate drainage and the condition of your plants and grass, take samples of your soil for lab analysis, and produce a plan to start improving your landscaping with biosolids.

If you want to see for yourself how biosolids can help, we can provide biosolids for a test plot for you to compare it side-by-side with your existing fertilizer regimen.

## **Can I pick up and haul biosolids myself?**

Yes. There are two options for hauling biosolids to project sites:

**1. The MWRD will deliver biosolids to your site for a nominal fee.** Biosolids are typically delivered by 24-cubic yard semitrailer (this is equivalent to about 22 tons of air-dried biosolids). The delivery of biosolids should be scheduled so that the biosolids are spread as soon as they are delivered to minimize the duration of stockpiling.

**2. You can pick them up yourself.** A minimum truck size of four cubic yards will be allowed on MWRD property to pick up biosolids.



**Contact the MWRD for more information about biosolids or to schedule a free consultation.**

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