

COMMON QUESTIONS ABOUT BIOSOLIDS, PART II

How are biosolids regulated in Pennsylvania?

Biosolids are regulated by DEP. To land apply biosolids in Pennsylvania, the generator of the biosolids (usually a municipal wastewater treatment facility or septage hauler) must obtain a general permit from DEP. Biosolids general permits are issued for a maximum of 5 years, at which time they may be renewed. This permit requires the generator to demonstrate that the biosolids produced at the facility meet all the quality standards for pollutants and for reduction of pathogens and vector attraction.

The generator also must demonstrate that each application site meets strict standards for application rates, site suitability and management practices and must secure written permission from each landowner where land application is proposed. Permittees must keep detailed records of biosolids quality testing results and land application data such as agronomic loading rates and cumulative pollutant loading rates at each application site.

DEP and the U.S. Environmental Protection Agency have established quality standards for wastewater solids intended for land application. DEP's regulations include a permitting system that emphasizes biosolids quality standards and best management practices.

The quality of the biosolids is assured through product testing and monitoring to verify that the requirements for pathogen reduction, vector attraction and pollutants are met. Only by meeting the quality requirements can treated wastewater solids be considered a biosolids product that may be safely applied to the land.

Wastewater solids that do not meet these environmental standards must either be incinerated or taken to a landfill for disposal.

How frequently are the biosolids tested to ensure safety?

Biosolids must be analyzed to ensure they meet the quality standards for land application. These tests include analyses for nutrients, metals and PCBs. The frequency of testing depends on the amount of biosolids generated by the treatment facility. Sampling frequencies range from once each month to once each year. In addition, generators must regularly monitor the treatment process. A properly operating treatment process ensures biosolids quality. Depending on the type of biosolids treatment, process monitoring may include factors such as temperature, time, pH and volatile solids reduction. DEP may sample for biosolids quality when inspecting treatment plants and application sites.

Does DEP require permit holders to have any special training?

Yes. DEP regulation requires generators and land appliers operating under biosolids permits to attend training classes. In the summer of 1998, DEP began offering a comprehensive 2-day training course for all generators and appliers of biosolids. This training will continue to be conducted on a regular basis at various locations across the Commonwealth.

Who is responsible if a problem develops at a land application site?

The biosolids generator holding the general permit is responsible if problems occur due to the land application of biosolids.

How will I know when biosolids are applied near my property?

When a generator of biosolids plans to use a site for land application, the generator must send or personally deliver a notice to each adjacent property owner at least 30 days before the first application of biosolids to that site.

In addition, DEP will evaluate the site to see if it is suitable for biosolids application. If the site is suitable, DEP will publish a notice in the *Pennsylvania Bulletin*. If the site is not suitable, DEP will tell the permittee to fix any problems. Land application may not occur or, if in progress, must be suspended until those problems are corrected.

Is it safe to eat food that has been grown using biosolids?

Biosolids are generally used on crops that are harvested for animal feed. Nevertheless, biosolids are safe for use in growing vegetable crops. Studies undertaken by the U.S. Department of Agriculture show that crops grown in fields amended with biosolids represent no threat to human or animal health when the biosolids were used in accordance with regulatory requirements. Exceptional Quality biosolids may, in fact, be sold or distributed for use on home gardens.

DEP regulations have specific requirements concerning the appropriate waiting times following biosolids use before grazing or crop harvesting.

How are biosolids used to reclaim mining sites?

Biosolids are being used successfully at mine sites to establish vegetation where other alternatives have proven less successful. Because of geographic setting or past mining practices, mine sites have little or no topsoil. The plant nutrients and organic matter in the biosolids help to regenerate a soil layer. To accomplish this, the initial biosolids application rate at mine sites is generally higher than the agronomic rate used at agricultural sites.

In addition to the general permit required of the biosolids generator, DEP requires special approval to allow land application under a mining permit or permit modification. The land application of biosolids for each mine reclamation site must follow the site restrictions and management practices required by the general permit.

For more information, visit www.depweb.state.pa.us, keyword: Biosolids.